ENGINEERING NEWS-RECORD

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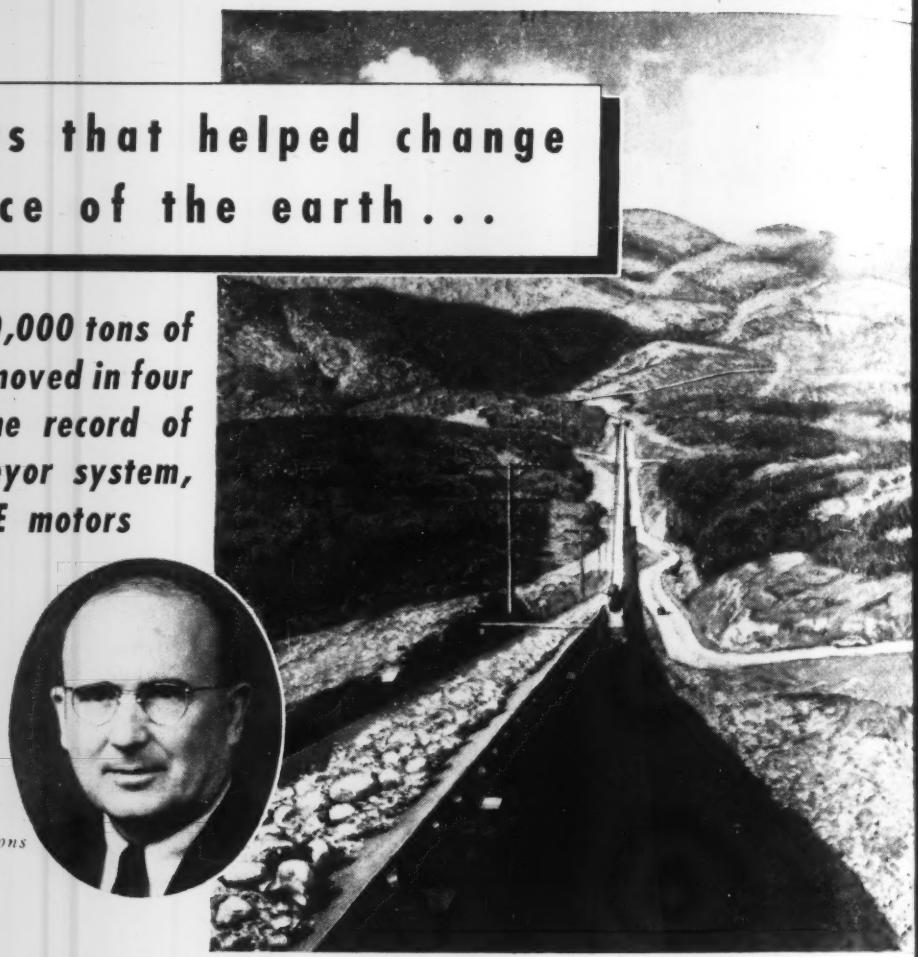
Conveyors that helped change the face of the earth . . .

More than 12,000,000 tons of sand and gravel moved in four years — that's the record of the Shasta conveyor system, driven by G-E motors



By:

R. F. EMERSON

Industrial Engineering Divisions

General Electric Company

WHEN plans for Shasta Dam were under way, it was found that the gravel bank where aggregate for the concrete was to be obtained was more than 17 miles away by normal transportation. The Kaiser-sponsored Columbia Construction Company, Inc., supplier of the aggregate, chose a 36-inch belt conveyor system as the most economical way to assure a steady flow of sand and gravel to the delivery hopper at Coram. It was the longest belt sequence installation attempted by the Goodyear Tire and Rubber Company up to that time—9.6 miles . . . 26 flights, varying from 850 to 3240 feet in length . . . lengths varying inversely with the grades which ranged up to 25 per cent . . . one motor for each length.

Motors were to run 20 hours out of every 24, moving 1000 tons per hour, at 550 fpm. This they did—for four years—until the dam was finished.

In selecting the motors, consideration was given not only to size and type of motor, but also to the necessity for smooth starts, correct speed control, and over-all dependability to keep the belts moving without strain and break-downs.

The motors chosen were 200-hp wound-rotor G-E motors. They were centrally controlled by G-E equipment from the receiving end at Coram. Whenever the switch was thrown, the first motor started the nearest belt, without strain, and thereafter the others started in sequence. The last conveyor to start was the one at Redding—where the aggregate was loaded. Motor controls were interconnected to automatically stop all flights between any stoppage and the gravel pit.

On the downgrade flights, the motors had automatic spring-set, power-released G-E thruster brakes to prevent a power failure from causing the load on the belt to pile up and spill at the bottom of the grade. Several of the downgrade belts regenerated power when the conveyor was in operation, and this power was used to help run the belts which carried material upgrade. No major failures in the belt system were ever reported. Constant checking of the entire installation—as it rolled above creeks, highways, a railroad, and the Sacramento River—kept the aggregate (over 12,000,000 tons in all) moving to the dam.

G-E engineers have wide experience in conveyor operations. They have planned installations of motors and control for the H. C. Frick Company's Colonial Mines, for the Oliver Iron Mining Company, for the conveyors at Denny Hill in Seattle, for Grand Coulee Dam, and for many other construction and earth-moving projects. If you have a project where the experience and skill of G-E engineers can be of help, we should like to work with you. General Electric Company, Schenectady 5, N. Y.

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The Week In Engineering and Construction

ENGINEERING NEWS-RECORD • APRIL 26, 1945 • VOLUME 134 • NUMBER 17

New construction throttled by lumber bottleneck

Even if WPB restrictions on new work are lifted after V-E Day lack of lumber is expected to delay the start of a large volume of new construction

Lumber is expected to be the bottleneck that will prevent widespread resumption of construction following the end of fighting in Europe even if some or all War Production Board restrictions on new work are lifted at that time. By V-E Day there may be ample supplies of other construction materials, but lumber, which is so essential to most construction operations, will be even more scarce than it is today, according to informed persons in Washington.

Effective May 1, military orders for western lumber, of which Douglas fir is the most important, must be given preferential treatment up to 45 percent of each sawmills' monthly shipment under an amendment to Directive 1 of War Production Board's Order L-335. Directive 1 affects sawmills which produce an average of 25,000 fbm. per day or more of any kind of lumber. At present these mills are required to give military orders precedence over all other orders except those rated AAA, up to 35 percent of their monthly shipments.

Military orders include purchases for the Army, Navy, Marine Corps, Coast Guard, Maritime Commission and War Shipping Administration, as well as those placed by the Treasury Department as agent for the Foreign Economic Administration.

Douglas fir production in the first quarter of 1945 is estimated to be 8.5 percent below that for the comparable period in 1944. The increase in the military set-aside is partly due to this falling off of production.

Lack of labor, both in the timber and in the mills, is largely responsible for the decrease in production, though repairs and shortage of equipment are also of importance. For example, 3,000 vehicles used in the lumbering industry are said to be idle for lack of tires. It is estimated that 20,000 workers strategically distributed could increase lumber production from the current annual rate of 30 billion to about 35 billion feet board measure.

Critical for long time

Shortage of lumber is seen as the only serious retardant to residential building, and it is a limiting factor in the start of construction that will be permitted after cut-backs of military orders following the end of the war in Europe. Crating and packaging for delivery to the Pacific, where rough handling must be anticipated due to lack of ports, will require large quantities of lumber. Also, the possible requirements for bridging and for other military construction in China, if the attack on Japan goes over to the mainland, requires allocation of a large amount of lumber as China has almost no local resources.

Timbers and dimension lumber continue to be more available than boards due to an inadequate supply of re-saw equipment and labor for cutting material to smaller sizes.

Even after the end of the Pacific war there may be a serious shortage of lumber for construction. Little lumber is now being air-dried and stockpiles are down to 6,000,000,000 fbm. compared to a normal of 15 to 20 billion. Almost no drying equipment has been installed, so that it will be a long time before adequate supplies of desirable classes of lumber are available, a serious threat to the part construction is expected to play in recreating civilian employment.

The WPB, is permitting some reconversion to start, notably in the automobile and machine tool industries. The board has stated that some buildings of limited size may be constructed where lack of them would otherwise be a bottleneck in resumption of industrial activity. Individual company estimates indicate that construction will total $35,000,000 to provide "turnaround" space for reconversion in the automobile industry.

U. S. Marine Corps Photo

Landing mat "unbuckled" with bulldozer

To speed invasion operations in going ashore on Iwo Jima, crews of the U. S. Marines use a bulldozer to "unbuckle" a strip of landing mat to permit ready transfer of building supplies from the beach to a captured air strip. Later the field was paved with the same type of pierced steel plank landing mat as that shown above.

Boundary-water treaty with Mexico gets qualified Senate approval

Resolution of approval includes interpretations intended to clarify treaty provisions with respect to controversial questions

By a vote of 76 to 10, the U. S. Senate on April 18 gave its consent to ratification by the President of the treaty with Mexico relating to the waters of the Rio Grande, Colorado and Tijuana rivers. (See *ENR* Jan. 25. 1945, vol. p. 123 for detailed analysis of treaty). President Truman is expected to ratify the treaty at an early date.

Many reservations offered

During consideration of the treaty on the floor of the Senate 41 reservations were offered. In the end, no one of them was adopted. Eleven of the reservations that were offered by the chairman of the Foreign Relations Committee to clarify the treaty finally were made part of the resolution authorizing ratification, as noted below.

Ratification of the treaty in the form in which it was signed on Feb. 15, 1944, was actively opposed before the Senate Foreign Relations Committee and on the Senate floor, but in the end the Senate did not ask for revision of the treaty before it would consent to ratification. Instead, in its resolution of consent to ratification of the treaty and of a clarifying protocol that had been attached to the treaty before it was taken up by the Senate, the Senate set down certain "understandings", which understandings it stated were to be mentioned in the ratification "as conveying the true meaning of the treaty and will in effect form part of the treaty." These understandings make no change in the substance of the treaty; their purpose is to put the Senate on record respecting its interpretation of certain provisions of the treaty about which questions had been raised at the hearings.

Colorado River water

The amount of Colorado River water allocated to Mexico was one of the principal objects of attack by opponents of the treaty. Opponents objected to the 1,500,000 acre-ft. guaranteed to Mexico as being too large an amount and they held that the treaty could be interpreted as allocating over twice this amount to Mexico. The Senate did not ask for a reduction in the amount guaranteed to Mexico, but it did undertake to eliminate all possibility of any misunderstanding as to the total amount being more than 1,500,000 acre-ft. It also added the statement that any use by Mexico of quantities in excess of that amount arriving at the Mexican points of diversion shall not give Mexico any future claim of right in excess of the guaranteed 1,500,000 acre-ft.

Proposed construction

In view of the fact that opponents had held that the treaty gave to the United States Section of the International Boundary and Water Commission power to undertake work beyond the international sections of the rivers covered by the treaty, the Senate included in its resolution a recapitulation of the works that in its understanding of the treaty are the only projects covered by its provisions. These are as follows:

1. Joint construction of three flood control and storage dams on the Rio Grande. (These are expected to cost about $86,000,000 with the U. S. paying approximately $53,000,000 and Mexico the remainder.)

2. Construction of dams and other joint works for diversion of Rio Grande water. Of these, the United States is committed to share in the cost of only one, estimated at $5,000,000.

3. Construction of stream gaging stations that will be needed to determine proration of flow in the lower Rio Grande and which will form the basis of determining the allocations of the waters.

4. Completion of Davis Dam and reservoir on the Colorado below Boulder Dam. This work is to be done solely by the United States at an estimated cost of $41,000,000 with funds already appropriated to the Bureau of Reclamation by Congress.

5. Joint investigation and reports and preparation of plans for flood-control on the Rio Grande below Fort Quitman, Texas.

6. Joint surveys and reports on establishment of hydro-electric plants at the international dams on the Rio Gra below Fort Quitman.

7. Joint investigations and repo and preparation of plans for flood co trol on the lower Colorado River tween Imperial Dam and the Gulf California.

8. Studies and recommendations de ing with the development of the Tijua River, the cost of any resulting constru tion to be divided between the t countries.

Powers of the commission

Opponents of the treaty held that gave powers to the Secretary of St and the U. S. Commissioner that plac them beyond the control of Congre To offset their fears on this score, t Senate specified that insofar as t treaty affects persons and proper within the United States these offici and all other officers or employe of the U. S. Section shall be subject statutory and constitutional control a processes, also that nothing in the trea shall be construed as impairing t powers of Congress to define the ter of office members of the U. S. Section.

The Senate also specified that nothi in the treaty should be construed giving the U. S. Commissioner pow to alter or control the distribution water to users within the territori limits of any state. Further, the Sena limited the jurisdiction of the commi sion to the international sections of t Rio Grande and the Colorado and to t land boundary.

In its resolution the Senate gave definition of certain terms used in t treaty such as "international dam a reservoir" and "international plants which had been controversial issues hearings in the treaty.

Although much heated debate o curred in the Senate regarding th point no reservation was added specif ing the quality of water to be deliver to Mexico. As part of this debate, it w pointed out that almost without exce tion water treaties do not guarantee the areas downstream water of a giv quality.

After President Truman ratifies th treaty it will be necessary for the Me ican Senate to give its consent befo the President of Mexico can ratify th agreement. After ratification of the co pact by both presidents, only an ex change of diplomatic ratification not will be needed to put the treaty int effect.

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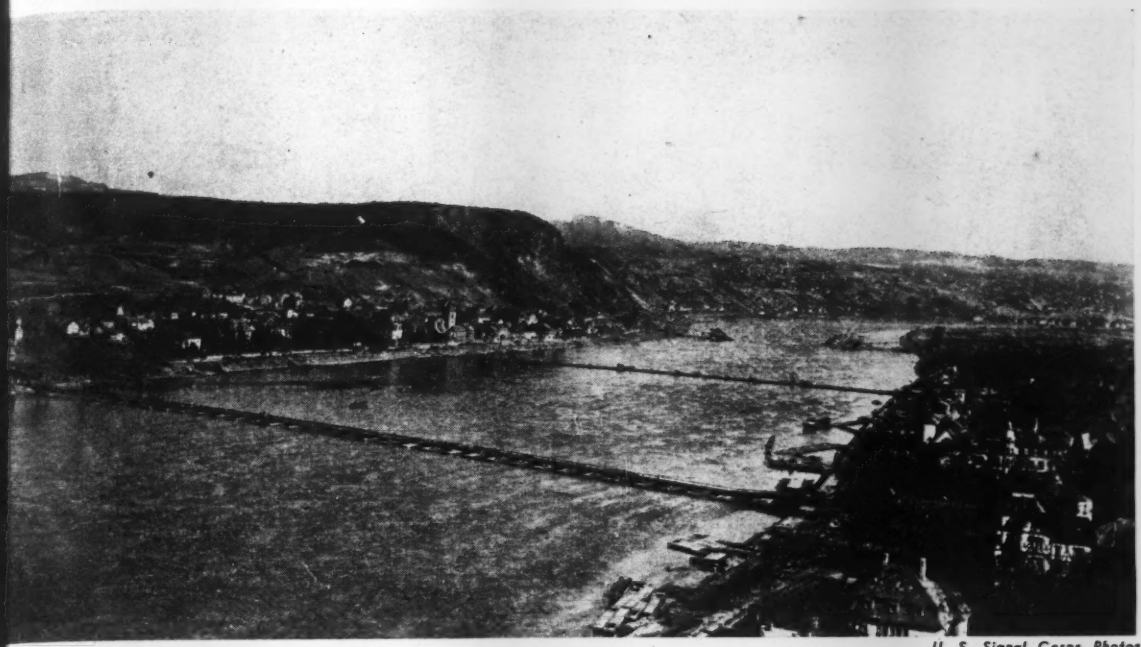


U. S. Signal Corps Photos

Longest floating Bailey bridge in E.T.O. crosses Rhine at Remagen

Among the several pontoon bridges built ss the Rhine at Remagen, to supplement steel railroad bridge that we captured e and to keep our bridgehead open after structure collapsed, was the longest ing Bailey bridge yet built in the pean Theater of Operations. Measuring 0 ft. from end to end, it was built by 148th Engineer Combat Battalion of the Army, some of the members of which beside their sign in the picture at the t.

the airview above, the Bailey is in the ground, and behind it is a treadway ge and then the wreckage of the steel oad span.

pstream, around the bend, is another ing bridge, of heavy pontoon type, which, conjunction with the treadway, provided ss to our bridgehead while the attempt epair the railroad span was being made.

R. E. Horton, hydraulic expert, dies at 69

Robert Elmer Horton, 69, authority hydraulics, died at his home near rrheesville, N. Y., April 22.

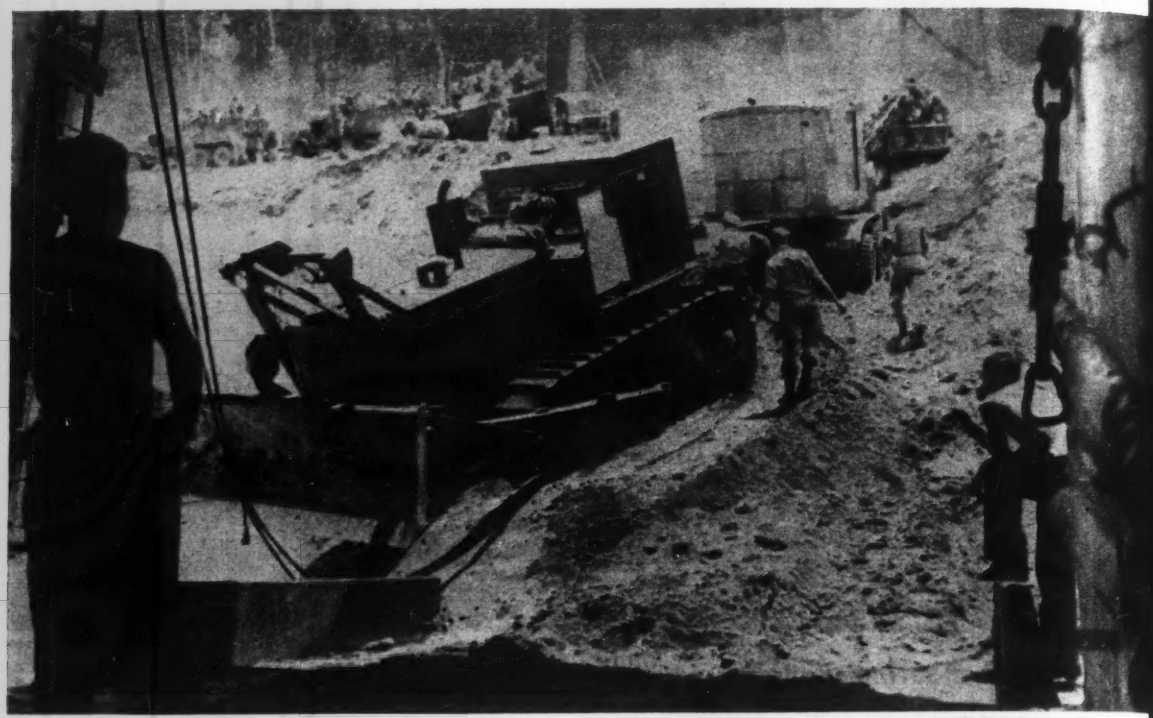
Mr. Horton was graduated in 1897 m Albion College, Albion, Mich., ere he received a Doctor of Science ree in 1932. He was an assistant ineer for the United States Deeper terways Commission in 1898 and 9, an assistant engineer of the ited States Geological Survey, 1900 1906, and an engineer of the United tes Hydraulic Survey until 1911. He in consulting practice thereafter.

From 1911 to 1925 he was retained as hydraulic expert of the Department of Public Works and the Attorney General's Department, State of New York.

He was consulting engineer, Board of Water Supply, Albany, 1924 to 1932; consulting engineer of the Power Authority, State of New York; member of the Advisory Council of the Federal Board of Surveys and Maps, and of the Engineering Board of Review of the Sanitary District of Chicago; and engineer consultant of the National Resources Committee, 1934 to 1935.

Mr. Horton was chairman of the Board of Consultants, Flood Control, United States Department of Agriculture, from 1940 until his death. He was the author of 150 scientific papers and eight technical books, dealing with such subjects as water wheels and power tables; means of determining stream flow during the winter season; and the hydrology of various areas.

The city council at Youngstown, Ohio, has enacted a 3 percent tax on net billings for electricity, gas, water, and telephone, expected to bring $275,000 in revenue annually. Part of the proceeds will finance plans for postwar city improvements.

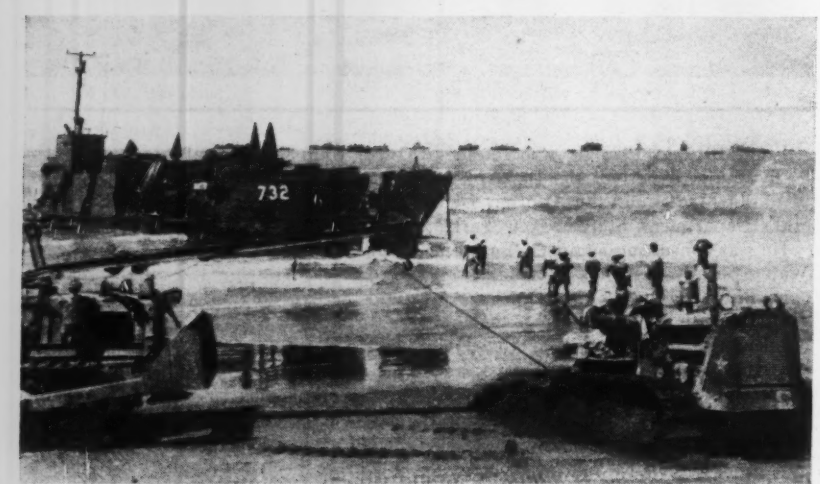


Photos by 3d Eng. Spl. Bri

Loading equipment in Dutch New Guinea for the Phillippines expedition. A crane is being pulled into the vessel.

Bulldozers on the Beachhead at Lingayen

"Our business is beachheads," slogan of the Army's 3d Engineer Special Brigade, fits well with the record of this group of amphibian engineers in the advance toward Manila. They are veterans of beach attack on enemy-held territory at a dozen places in New Guinea and nearby islands—places whose names will stand out prominently in the historic campaign that pushed the Japanese back and out of the Southwest Pacific area.



An LCT is quickly moored to Blue Beach, Lingayen Gulf, P. I., by a tractor that digs itself into the sand as an anchor.

At Lingayen Gulf in the Philippine it was the 3d Brigade, split into sho troops and boat troops, that was respo sible for landing men and materi Employing more heavy engineer equi ment, it is said, than any similar-siz unit in the Army, shore troops be built beach installations and unload the LCMs used by boat troops to light cargo ashore.

They had already established a Sout west Pacific record by unloading som 2,110 tons in one day at Finschhafe New Guinea, and in a 5-mo. perio had unloaded 153,506 tons of cargo Aitape under some of the worst beac conditions in the New Guinea are Their work extended over a wide rang of engineering construction and in cluded maintenance and repair of the own land and water transportatio many times under enemy fire and a attack. Prior to the Philippine lan ing, the 3d Brigade had establishe beachheads at Yalau Plantation, Tal sea, Gasmata, Madang, Wakde, Noe foor, Sansapor and elsewhere.

Organization of the Amphibian E gineer Brigades, later named Engine Special Brigades, started in May, 194

response to a call from the European eater of War for formation of units ined to organize and operate beach- ds for the invasion of France. Plans re organized by the Chief of En- eers in cooperation with the U. S. vy, U. S. Marine Corps, Royal Navy, tish Army, U. S. Coast Guard and S. Coast and Geodetic Survey. After invasion of Europe was postponed, as decided that they were well suited operations in the Southwest Pacific, the 3d Brigade was assigned to t theater. (Other brigades followed er.) Activated at Camp Edwards, ss., the 3d Brigade trained at Car- belle, Fla., and at Fort Ord, Calif. It rived on the front in the Southwest cific about the end of 1943.

To provide landing craft for the phibian engineers, an LCVP assem- plant was put in operation in May, 43, at Cairns, Australia. More than 0 landing craft were put together re before the program was aban- ned in favor of an LCM and LCT embly plant established nearer the nt at Milne Bay. Here, rate of pro- ction climbed steadily from the ginal two landing craft a day to six the early months of 1944. By Feb- ary, 1945, in three shop battalions mposing the Boat Building Command. er 1,800 LCMs had been assembled r basic use by the Engineer Special igades, and 40 LCTs had been as- mbled for the Navy.

ractors and LCM (top right) salvage rtion of a pontoon causeway carried way by heavy waves. An LCM (cen- r right) is lifted by a crane and lled up on the beach by a bulldozer r repairs. A jetty (bottom right) ade of pontoon cells is pulled into ace on S-Day at Blue Beach.

rane being unloaded from LCM on S-Day at Lingayen. Note pontoon cell wharf to landing craft in middle distance.

Greater postwar construction activity planned at A.S.C.E. board meeting

Oscar L. King named to head enlarged A.S.C.E. Committee on Postwar Construction—Three more engineering employee classification and salary studies to be made soon

Aggressive action was taken by the Board of Direction of the American Society of Civil Engineers at its quarterly meeting April 16-17 in Chicago to increase the tempo of its postwar construction activities, particularly in the field of private construction. To this end, the board approved a recommendation by the society's Committee on Postwar Construction that each of four other engineering societies and the American Institute of Architects be invited to appoint a representative to participate during the committee's continued functioning in a correlative capacity as the Construction, Action and Advisory Committee of the national Committee for Economic Development. The four engineering societies are: The American Institute of Mining Engineers, the American Society of Mechanical Engineers, the American Institute of Electrical Engineers and the American Institute of Chemical Engineers.

New head for postwar committee

Oscar L. King, director, Department of Public Service, Knoxville, Tenn., was appointed director of the society's Committee on Postwar Construction, effective May 1. He succeeds Mark B. Owen, who will resign on that date to enter private practice as a consulting engineer in Indianapolis, Ind. The board also increased the committee's operating budget to permit an expansion of its activities, and to provide for the appointment of an assistant director.

It was announced at the meeting that Maj. Gen. Philip B. Fleming, administrator, Federal Works Agency, recently invited the A.S.C.E. to appoint a representative to a newly formed Public Works Construction Industry Advisory Committee which will act in an advisory capacity to FWA. E. Lawrence Chandler, Washington, D. C., representative of the society, was named by the board to serve on this committee. It was reported that a representative from each of ten other prominent organizations in the construction industry will be invited to serve on the committee.

Continue salary studies

The board also authorized the sending of a staff member to Los Angeles to make a classification and salary study of engineering employees of Los Angeles County. This will be followed by similar studies of engineering employees in the Louisiana and Maryland state highway departments.

Board approval was given to recent amendments to the constitutions of the Tri-City, Arizona and Cleveland sections of the society to facilitate establishment of a local committee on employment conditions. These committees are to implement the society's program of aiding professional engineering employees in meeting issues raised under existing labor laws.

Engineers Joint Council

A request from the Joint Conference Committee, which is made up of the presidents, most recent past presidents and the secretaries of the five engineering societies mentioned above, that it be permitted to change its name to the Engineers Joint Council was approved by the board.

Other administrative activities of the board included the continuation during 1945 of its policy of cencelling membership dues, upon request, of members serving in the armed forces with a rank equal to or below that of captain in the army or senior grade lieutenant in the Navy. Since the first of this year, 593 such cancellations have been made.

An expression of appreciation was tendered Mark B. Owen for his service as director of the committee on postwar construction, and similar courtesy was extended to Howard F. Peckworth, recently resigned from the staff to head the American Concrete Pipe Association, for his handling of matters relating to collective bargaining by professional engineering employees.

Due to ODT restrictions on travel the meeting was limited to members of the board of direction and the staff. The next board meeting is tentatively scheduled for July 16-17, but the city in which it will be held was not decided according to George T. Seabury, secretary.

YOU CAN HELP SAVE PAPER FOR WAR

Paper is a Number 1 war material shortage—because over 700,000 different war items are wrapped, packaged, labelled, tagged, or made from paper or container board. The Pacific war, when it speeds up, will require stupendous amounts of paper and board since double and triple packing are required for protection against weather, insects, etc.

So please—

1. **Share this magazine with your associates. Because of the paper shortage, the number of copies is limited.**
2. **Organize for a continuous drive in your office and plant to collect waste paper of any kind to put into paper salvage. Clean out old files, dead correspondence, obsolete records, useless display materials, carton, etc.**

Aid the war effort—speed victory—
DO THIS EXTRA BIT TO HELP.

. . .

Flood waters wash out Kansas City bridge

Undermined by swirling flood waters of the Kaw River, the south pier of the Twelfth Street Bridge in Kansas City, Kan., tilted upstream and washed out on April 17 in a typical scouring failure, carrying with it one cantilever and anchor arm plus a suspended span. At the time of failure the water elevation was still several feet below the top of the pier.

Built about 1890, the original Twelfth Street Bridge had a 20-ft. roadway accommodating two electric railways. It served until 1924 when it was extensively rebuilt. The roadway was lengthened and widened to carry a four-lane highway and electric railway. Old river piers were lengthened and underpinned by concrete encasement. In addition new timber piles were driven and the whole encased by steel sheetpiling 30 ft. long and protected by extensive rockfill.

The trusses were extensively damaged and the wooden floor of the river spans destroyed by fire in 1939. Retaining Sverdrup and Parcel, of St. Louis, Mo., as consulting engineers, the owners (Wyandotte County) decided to replace the streetcar tracks with a two-lane roadway. As reconstructed in 1940, the bridge consisted of girder span approaches on the south, three 200-ft. deck spans of cantilever type with central suspended span, and an original 275-ft. through span on the north end.

Since the loading was decreased by the narrowed roadway, the substructure was not involved in the revisions. However, soundings were made at the time of reconstruction of the superstructure and it was reported that the rock fill in 1924 was still in place and that the piers showed no movement.

OUR ENGINEER GENERALS

Commanding General, Army Service Forces

GENERAL BREHON B. SOMERVELL

First engineer officer ever to reach the ll rank of general, Brehon B. Somerell is also one of the Corps of ngineers' most dynamic personalities. oubtless it is his boundless energy acked by an unusual amount of enineering and executive ability that acounts in large measure for his specular rise to unprecedented rank.

Like all dynamic individuals, there nothing lukewarm about General omervell; he is either strongly in favor f an undertaking or he is outspokenly pposed to it. As a result, he makes nemies at times, but being naturally regarious and genial, his friends far utnumber his foes.

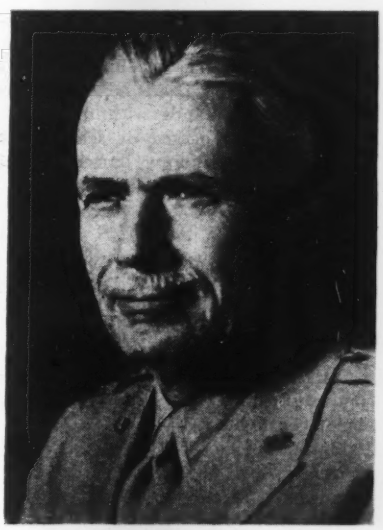
Born in Little Rock, Ark., in 1892, oung Somervell graduated from West oint in June, 1914, just before the utbreak of World War I in Europe. e was sent first to France as a mili-ry attaché, was brought back to this ountry within a few months to fill some f the positions usually filled by young eutenants in the Engineer Corps, and March, 1916, went to Mexico with eneral Pershing. After six months ere he returned to Washington to the ngineer School.

In World War I

Our entry into World War I and the pid expansion of our armed forces rought to Lieut. Somervell assignment adjutant of the 5th Reserve Engiers, one of the nine railway regiments at were recruited and organized in pril and May of 1917. And soon after is assignment came a bright new set captain's bars.

The new task was no easy one. The ly regular officers assigned to the giment were Col. Edgar Jadwin and pt. Somervell; all others were called om the reserve, and practically all e men were newly enlisted. Out of is raw material an effective organizan had to be developed without benef regular training camps.

Soon, competition developed among ese new engineer units as to which ould be the first to sail for France. and it was in that competition that Capt. Somervell got his first practical experience in the advantages of knowing the right people when you want something done inside the Army. Just how it was accomplished probably never will be known; but what is known is that the Fifth Engineers was the first unit to sail, beating the First Engineers by a few days.



General Brehon B. Somervell

But the luck of the Fifth, by then renamed the 15th Engineers (Railway), ended right there. Instead of being sent to an active front like others of the new railway engineer units, it was assigned to the peaceful job of building railroad and storage facilities in central France.

This humdrum work of being adjutant of a regiment far from the active front was not to Capt. Somervell's liking, but he did not have to wait long for a change. Another automatic advance in rank came in August and he was transferred from the regiment to take up various duties, ending in his assignment to the 89th Division as assistant chief of staff in the operations division, and later in the personnel division.

It was during this time that he won the Distinguished Service Cross for a daring reconnaissance of damaged bridges at Pouilly made with two scouts 500 meters in advance of the American outposts.

With the Army of Occupation

After the Armistice Lt. Col. Somervell served with the Army of Occupation in the Supply Division until September, 1920, when he returned to this country, reverting to his permanent rank of captain. He was awarded the Distinguished Service Medal about this time for his service with the 15th Engineers and with the 89th Division.

The next five years were occupied with routine tasks. In March, 1925, Capt. Somervell was granted leave of absence to accompany Walter D. Hines to Europe to make a survey of navigation conditions on the Rhine and Danube rivers for the League of Nations. That took about five months. There followed a year at the Army War College and four years in charge of river and harbor work in the Office of the Chief of Engineers, then a few months as head of the Mississippi River Commission, and finally, two years as assistant district engineer in the U. S. Engineer office at Memphis.

In May, 1933, at the request of the Turkish government, he was detailed to make an economic study of that country, a task that kept him abroad for about a year. Upon his return to this country he spent some 15 months in the Office of the Chief of Engineers, and when work on the Florida Ship Canal was authorized by the President, he was sent down there to head up that project as district engineer at Ocala.

Heads WPA at New York

That was in July, 1936. Somewhat over a year later when the Florida canal work was shut down because Congress refused to appropriate more

(*Continued on following page*)

funds, Col. Somervell took on his toughest assignment to date, Works Progress Administrator for the City of New York. At that time the WPA had 230,000 people on its rolls, its efficiency was at an abnormally low level and sit-down strikes and usurpation of power by radical groups within the organization had been a source of endless trouble.

In Col. Somervell the left-wingers found more than a match. He could be as hard-boiled as the toughest of their leaders and when they undertook to defy him, he let them know in no uncertain terms who was boss.

His four years of service as head of the New York WPA brought Col. Somervell national reputation as an administrator. Doubtless this service added materially to his prestige with President Roosevelt, hence when it was announced in December, 1940, that he had been recalled to military service it appeared evident that he was scheduled for an important post in this country's expansion of its defense forces.

Assigned to Construction Division

Col. Somervell's first assignment head up the Construction Division of upon his returon to active duty was to the Quartermaster Corps. That agency, which in peace time does relatively little construction work, had become swamped under the great amount of new work required for the expanded program and was badly in need of direction by a man experienced in supervising large construction operations. Somervell's able handling of that work brought him the award of an Oak Leaf Cluster to his Distinguished Service Medal.

Soon after going to the Construction Division Col. Somervell was promoted to brigadier general. Just before this country went into the war he was promoted again and assigned to the General Staff of the Army as Assistant Chief of Staff, G-4, in charge of supply. At the same time, the construction operations of the Quartermaster Corps that he had headed were turned over to the Corps of Engineers.

Army Service Forces

Still further advances were in prospect. In March, 1942, a drastic reorganization of the Army was made, and under that reorganization he was appointed commanding general of the Service of Supply with the rank of lieutenant general. A year later the S.O.S. was renamed the Army Service Forces.

As head of the Army Service Forces, Lieut Gen. Somervell played a leading role in that part of the elaborate preparation for the invasion of France that had to be done in this country. For this he received wide commendation from members of Congress. Quite different opinions were expressed, however, by Congressmen in regard to his handling of the ill-fated Canol project in the Yukon. His insistence on going ahead with that oil pipe line and refinery project long after most people had concluded that it should be abandoned, brought sharp criticism from members of Congress, including the man who now is Commander-in-Chief. That criticism, however, was not of a character to keep the Senate from approving his advance to the rank of general.

His spectacular rise to high rank has not dimmed the deeply human characteristics that have won General Somervell his many friends. When he was WPA Administrator at New York he was a familiar figure around the Engineers Club. Recently he was there for a dinner in advance of a meeting at which he was to speak. While being escorted through the grill room on his way to the adjoining Engineering Societies Building, flanked by an imposing array of aides and other officers, he spotted a familiar face behind the bar. Slipping from the group he stepped to the bar, shook hands with the mank back of it, and passed on leaving an embarrassed but happy bartender behind him.—V.T.B.

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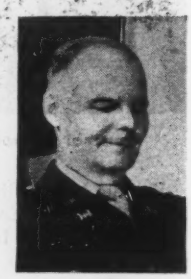
Bruton succeeds Kelton as Pacific Div. engineer

Col. Edwin C. Kelton, Pacific division engineer, U. S. Army Engineers, since October, 1943, retired from the Army April 15 because of poor health and was succeeded by Brig. Gen. Philip G. Bruton as division engineer in charge of military construction in the eight western states and as engineer for the Ninth Service Command.



Edwin C. Kelton

General Bruton, who had recently served as director of labor, War Food Administration in Washington D. C., previously was executive officer of the North Atlantic Division of the Army Engineers in New York. He also held positions of district engineer, Buffalo river and harbor district, New York, from 1938 to 1940, and assistant to the division engineer, Eastern Division at St. John's Newfoundland. In May, 1941, he became district engineer of the Newfoundland engineer district.

As Pacific Division Engineer, Colonel Kelton during the last two years had directed construction valued at $1,200,000,000, in addition to being responsible for civil activities of the Corps of Engineers, including rivers and harbors and flood control work for the western region. He also has been in charge of seven depots supplying engineer equipment to the Pacific, and, as Ninth Service Command Engineer, has been responsible for repairs and maintenance of about 172 installations.

P. G. Bruton

Previously Colonel Kelton directed construction of the Pan American highway and was awarded the Nicaraguan Presidential Medal of Merit for services he performed in that republic. He was district engineer of the Los Angeles district from 1939 until 1942.

General Bruton will maintain an office at headquarters, Ninth Service Command, Fort Douglas, Utah, in addition to his division office in San Francisco, Calif.

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Big Deficiency Bill goes to President

Following several days in which the bill had been in conference, Congress this week reported out a $2.4 billion dollar Deficiency Appropriation Bill (H. R. 2374) and forwarded it to the President for his signature. The bill was passed by the House the first week in March and by the Senate on March 26.

The Senate increased several appropriations and in final form the bill contains considerable funds for construction. These include: Federal Works Agency, $20,000,000, to be available for new community facilities projects after June 30, 1945; Public Roads Administration, $15,000,000 for access roads and $8,000,000 for the strategic highway network; National Housing Agency, $84,373,000 for new construction and for reuse of existing war housing units by moving them to new locations; and Bureau of Yards & Docks, U. S. Navy, $114,300,000 for public works construction.

Other construction added by Senate amendments includes $1,000,000 to the U. S. Army Engineers for flood-control surveys and planning; $4,100,000 for construction and equipment at Langley Field, Virginia.

Parkways and freeways now legal in New Jersey

The New Jersey legislature has ssed, and Governor Walter E. Edge signed, a bill authorizing a system arkways and freeways in that state. he new law will enable New Jersey egin, in the postwar era, a parkway elopment to link playgrounds and eational areas together by park- that will make possible safe, effi- and scenically attractive travel in y parts of the state.

here are five special features of the as follows:

Authorizes construction of occa- al parking areas on parkways, plant- treatment of borders and landscape s, and construction of recreational other necessary non-commercial lities.

2. Authorizes acquisition of 300-ft. right-of-way for freeways except where more is needed for grade separations and connecting roadways.

3. Provides for controlled access in accordance with the best prevailing practice of the U. S. Public Roads Administration.

4. Authorizes the highway commissioner to restrict parkways to passenger vehicles. But if a whole highway is taken over for this purpose, the approval of the Public Utility Commission will be necessary to divert bus lines that have franchise rights.

5. Prohibits authorization or conduct of commercial enterprises or activities either by the State Highway Commissioner or any other agency of the state within or on the property acquired for or designated as a freeway or parkway, as defined in the act.

Frisco-Oakland Bridge is damaged by fire

Fire caused by a shorted third rail on the Key System line on the San Francisco-Oakland Bay Bridge recently damaged or destroyed a 1,900-ft. stretch of ties and electrical equipment at an estimated loss of $10,000.

Engineers who examined the fire-scarred trackage reported that a major portion of the ties over a 600-ft. section of the bridge should be replaced, along with the Key System's signal system.

Fire fighting equipment from San Francisco, Oakland and nearby Treasure Island was called out to assist bridge firemen to extinguish the blaze. Train traffic was interrupted for two hours while the fire was being brought under control and while the tracks were being examined.

Minnesota to spend $6,000,000 for capitol approaches and a war memorial

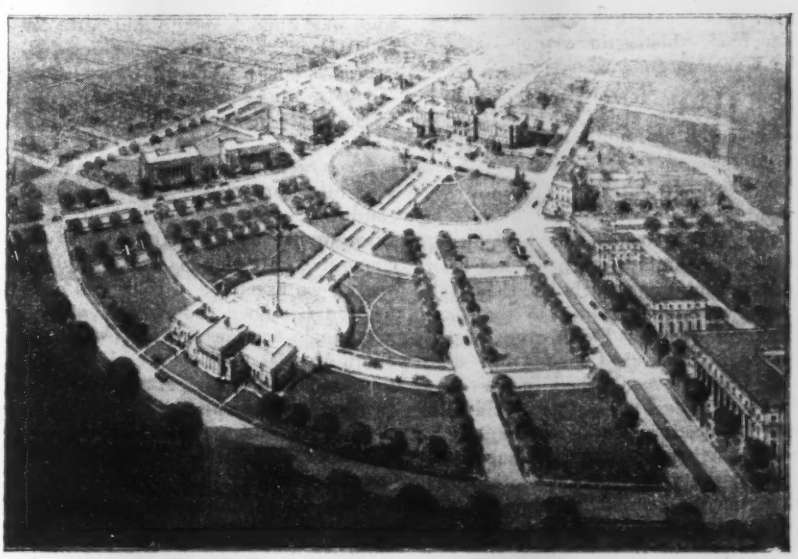
s a postwar project the state of nnesota and the city of St. Paul will laborate in an ambitious plan for itol approaches and a state war morial The legislature has just sed and the Governor has signed the which creates a State War Memor- Commission and appropriates $2,- ,000 for the acquisition of the neces- y lands, $2,000,000 for the construc- n of the memorial, and authorizes obligates St. Paul to spend $2,000,- on the rearrangement of streets.

The general plan takes in an area of acres in which are the present cap- building, the historical building and state office building. It is a fan- ped development bounded on either e by diagonal streets centered on the ne of the capitol and of sufficient dth to take in the whole capitol lding, to the axis of which it is sym- trical.

The buildings now in that area, which largely boarding houses and tene- nts, will be razed and the area put a park, and in this park will be cted a war memorial, the character which is to be determined later. The mmission may adopt the plans pre- ted to the Governor by his advisory mmittee. These were prepared by the Paul City Planning Board of which orge H. Herrold is planning engi- r. Clarence Johnston & Associates, hitects and engineers, of St. Paul, e employed by the St. Paul board to ke the overall drawings.

The commission is authorized to set a competition for designs for a war morial which may or may not be a lding. The award jury is to consist three architects or engineers. Acquisition of the grounds is not to be started until plans for both the war memorial and the beautification of the grounds have been decided upon. A State War Memorial Fund is set up and the state auditor is authorized to transfer $1,000,000 to this fund from the state treasury, and also to levy upon taxable property in the state taxes sufficient to produce $300,000 for each of the years 1947 to 1956 inclusive. The state auditor is also authorized to issue and sell war memorial certificates of indebtedness as funds are needed.

In carrying out these plans it will be necessary for St. Paul to revise the entire street system within the capitol grounds area. While this will remove considerable property from the tax roll—a total of 334 buildings—it is estimated that there will be immediate construction of modern apartment hotels, boarding houses, etc., in the vicinity to house the population now living there and many others, and that the taxable value of this development will in a short time equal the values now taken for the improvement.



Above is a perspective view of the Capitol Grounds Center showing existing state buildings and tentative locations for future state buildings, which will be erected along the diagonals. As envisioned by the planning board, the war memorial is to be placed on the axis of the capitol or about one-quarter mile south of it. The capitol building was designed by Cass Gilbert.

Policy established for release of sanitary engineers from services

Procurement and assignment facilities will be used "in reverse" to assist in return of men to essential civilian duties.

Facilities of the War Manpower Commission's division of sanitary engineering procurement and assignment service will be utilized "in reverse" to assist in obtaining the release of sanitary engineers from the military forces and their return to civilian work. This policy was revealed in a memorandum to state procurement advisors, which was made public last week by the W.M.C.

The plan that has been approved, and which will be put into effect at the proper time, calls for: (1) a summary statement from the employer, showing the need for sanitary engineering services; (2) certification by the state advisor that the release of the sanitary engineer is necessary in the interest of public health; and (3) a favorable recommendation from the Office of the Procurement and Assignment Service, War Manpower Commission.

Officer initiates action

These documents are to be forwarded to the officer concerned, who submits them as justification for his resignation from the Army. They are then forwarded through channels to the Adjutant General, Separations Services, Munitions Building, Washington, D. C.

In all cases the application for release must be initiated by the officer concerned. Instructions prepared by the War Department on Dec. 29, 1944 (Circular No. 485, Sect. III) provide for the release of Army officers who are essential "to public health, welfare or interest."

Operating since 1943

The procurement and assignment service for sanitary engineers has been in operation since early in 1943, following a recommendation by the Committee of Sanitary Engineering of the National Research Council that such a division be established in the War Manpower Commission to provide for well-balanced allocation of engineers. State advisors, in most instances the chief sanitary engineers of state health departments, carried out the program of classifying engineers as "essential for protection of civilian health" or "available" for military service.

A roster of 3,559 sanitary engineers was compiled of whom 1,503 were commissioned (959 in the Army, 411 in the U. S. Public Health Service, and 133 in the Navy). Declared essential to civilian pursuits were 799 men.

Abel Wolman, professor of engineering at The Johns Hopkins University, is chairman of the Committee on Sanitary Engineering of the National Research Council, which approved the plan outlined above. Gordon M Fair, professor of sanitary engineering at Harvard University, is chairman of the subcommittee on personnel.

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New director named for ASCE postwar work

Oscar L. King, director of public service at Knoxville, Tenn., has been named director of the research and development work of the Committee on Postwar Planning of the American Society of Civil Engineers, as noted in the report of the meeting of the society's Board of Direction elsewhere in this issue. He succeeds Mark B. Owen, who was appointed full-time director about a year ago to relieve Vincent B. Smith, associate editor of *Construction Methods*, who had been loaned to the committee to inaugurate its promotional work.

O. L. King

Mr. Owen has resigned to become a partner in the Russell B. Moore Co., consulting engineers, Indianapolis, Ind. Prior to his service with the postwar committee, Mr. Owen had for seven years been executive in charge of engineering design and sales of all municipal equipment in North and South America for a New York corporation producing municipal and industrial furnaces and incinerators. Previously he had served for seven years as commissioner of public works and engineering for the City of Dearborn, Mich., moving up to this position after two years as assistant city engineer. His municipal service followed several years' work with Hubbell, Roth and Clark, consulting engineers, Detroit, for whom he had acted as resident engineer. He is a past president of the American Public Works Association.

Mr. King is a civil engineering gra[duate] of the University of Tennessee, the class of 19[2]. Subsequently [he] was with the T[ennessee] Eastm[an] Corp. and Bord[en] Mills on industri[al] and housing wo[rk] and then for thr[ee] years was wi[th] the Tennes[see] Highway Depa[rt]ment. Thereaft[er] he was in priva[te] practice for a brief time and then spe[nt] 18 months with the Tennessee Fores[t] Department.

M. B. Owen

In 1931 and again from Octob[er] 1934 to March 1942 Mr. King w[as] with the engineering department [of] Kingsport, Tenn., being appointed c[ity] engineer in Oct. 1934. More recentl[y] he was field engineer for the Portla[nd] Cement Association at Birmingha[m] from March 1942 to Jan. 1, 1944.

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High stages continue on Mississippi River

Stages above those of the 1937 flo[od] were still being recorded early th[is] week on the lower Mississippi fro[m] Baton Rouge to the mouth of the riv[er] and extreme highwater existed o[n] numerous tributaries, the U. S. Weathe[r] Bureau reported Tuesday. At Bato[n] Rouge the stage starting April 14 fo[r] eight days was continuously above 45[.] ft., the maximum reading in the 193[7] flood and on April 24, following a slig[ht] fall, the level rose to 45.3 ft. due t[o] over an inch of precipitation.

At New Orleans the stage has av[er]aged 19.6 ft. for several days, whic[h] compares with a maximum of 19.3 f[t.] in 1937 and an all-time high of 21.[3] ft. in 1922.

Highwater was also in progress earl[y] this week on the upper Mississipp[i]. From Keokuk, Ia., to the mouth of th[e] Missouri River above St. Louis stage[s] from 1 to 2 ft. above flood level we[re] reported. At St. Louis a crest of 33.[5] ft. was reported April 22 which com[-] pares to a flood stage of 30.0 ft. and [a] maximum recorded high of 38.9 ft. i[n] 1943. Farther downstream at Ca[pe] Girardeau, where the all-time high rea[d]ing is 42.4 ft. set in 1943, a level [of] 38.5 ft. was reported April 23. Th[is] level was expected to be the crest.

The White River April 18 rose t[o] 35.9 ft. at Newport, Ark., exceedin[g] by 0.3 ft. the high established there [in] 1927. At Clarendon, Ark., Tuesday th[e] stage on the White was 39.1 ft. and [a] crest of between 41 and 42 ft. was ex[-]pected.

News of the Engineering Schools

Donald E. Stearns has been appointed professor of civil engineering and chairman of the department of civil engineering in the College of Applied Science, Syracuse University, Syracuse, N. Y., effective July 1.

Prof. Stearns was born in Warsaw, N. Y., in 1904. In 1927, he was graduated from Alfred University with a Bachelor of Science degree majoring in mathematics. He entered the Massachusetts Institute of Technology in the fall of 1928 and received the degree of Bachelor of Science in Architectural Engineering in 1930.

During the period from 1930-1931, he was employed by the building bureau of the National Council of the Y.M.C.A., and in the fall of 1931, he entered Harvard, receiving the degree of Master of Science in Civil Engineering in 1932.

From 1932 to 1941, Prof. Stearns was a member of the faculty of Rhode Island State College Since 1941, he has been associated with the firm of Fay, Spofford and Thorndike, consulting engineers, Boston, Mass., as engineer in the sanitary division.

Associations of women students of engineering and architecture have been organized at the University of Texas and the University of Illinois. Plans are being considered for a nation-wide organization.

The Columbia University Engineering School Alumni Association has awarded the 1945 Egleston Medal to Richard E. Dougherty, vice-president of the New York Central System. The Egleston Medal was established in 1939 in memory of Thomas Egleston, pioneer in engineering education and a member of the Columbia faculty from 1863 to 1900. It is awarded annually to an alumnus who distinguishes himself in his profession.

A. Pen-Tung Sah, president of the National University of Amoy, China, and former professor of engineering at Tsing-hua University in Peiping, is serving as visiting professor of engineering at Stanford University for three months. It was announced recently by President Donald B. Tresidder. One of six Chinese educators invited by the Department of State to visit America, Dr. Sah, who is also using the facilities of the engineering laboratories for further study, received an engineering degree from Stanford in 1924 and later attended Worcester Polytechnic Institute in Massachusetts where he earned the D. Sc. degree.

A $10,000,000 construction program for Illinois Institute of Technology during the next decade was approved April 9 by the institute's board of trustees, according to Henry T. Heald, president. The program includes 16 buildings ranging in cost from $300,000 to $750,000, exclusive of a new $1,200,000 dormitory extension. All buildings have been designed by Mies van der Rohe, head of the architectural department at Illinois Tech.

A special legislative committee in Georgia has recommended the allocation of a minimum of $2,000,000 for the construction of new buildings at the Georgia School of Technology, Atlanta. An academic classroom building, a library and an administration building are proposed. There has been prepared a comprehensive and detailed plan for development of the institution over a six-year period at a cost of $6,390,000.

Alfred Alireza, engineering student at the University of California, has been appointed Saudi Arabia's delegate to the United Nations' Security Conference opening in San Francisco April 25. Mr. Alireza plans to resume his engineering studies after the conference.

The provincial government has made a large grant for the expansion of the University of British Columbia. The civil and mechanical engineering departments will receive $300,000 for applied science laboratories.

JOBS OF THE WEEK

VETERAN HOSPITAL, Tomah, Wis.

Veterans Administration, Washington, D. C., awarded a contract to build a veterans' hospital to Gust K. Newburgh Construction Co., Chicago, Ill., at $4,467,900.

HOSPITAL ADDITION, Toronto, Ont.

Redfern Construction Co., Inc., Toronto, has been awarded a contract for the construction of superstructures on Active Patients and Outpatients buildings at Sunnybrook Military Hospital by the Department of Public Works, Ottawa, Ont. The estimated cost is $4,200,000.

FILTER PLANT, Oklahoma City, Okla.

Lippert Brothers, Oklahoma City, Okla., was the lowest bidder for construction of the Bluff Creek Filter plant and pump station at $1,060,966. City of Oklahoma City opened bids. V. V. Long & Co., Oklahoma City, are the engineers.

HOSPITAL, Dublin, Ga.

Beers Construction Co., Atlanta, Ga., was the lowest bidder for constructing Naval Hospital expansion, including six ward buildings, connecting corridors, cold storage building and animal house at $1,494,745, for the Bureau of Yards & Docks, Navy Department, Washington, D. C. Bids were opened at Dublin by Lt. Commdr. Homer F. Pfeiffer, CEC (S), USNR, officer in charge of construction.

MALTING PLANT, Transcona, Man.

Commonwealth Construction Co., Ltd., Winnipeg, Man., has been awarded contract for the construction of a malting plant by Dominion Malting Co., Ltd., Winnipeg, Man. Estimated cost is $1,000,000.

TEST BUILDING, Schenectady, N. Y.

General Electric Realty Co., Schenectady, N. Y., awarded separate contracts for the construction of a test building to cost $1,257,500. Total cost with equipment is $6,500,000. United Engineers & Constructors, Inc., Philadelphia, Pa. is the engineer and architect.

HOUSING, Florida

Bureau of Yards & Docks, Navy Department, Washington, D. C., awarded a contract for constructing 835 housing units for Naval Personnel at Jacksonville, Cecil Field, Green Cone Springs, Banana River, Sanford, Deland, Lake City and Pensacola, Fla., to Ivy H. Smith Co., Jacksonville, at an estimated cost of $3,000,000.

Note—Additional bidding and contract news on many projects large and small appear in the Construction News section beginning on page 13.

OBITUARY

Charles Edward Waddell, 68, internationally known consulting engineer, died at Asheville, N. C., April 20, of injuries suffered in an automobile accident the day before.

Dr. Waddell was consulting engineer for the George W. Vanderbilt estate at Biltmore, a show place for the last five decades. He built many steam and hydroelectric plants along the Eastern Seaboard and at one time was a consulting engineer for the city of Medellin in Colombia. In 1912 he served as consulting engineer for the United Electric Securities Company of Boston.

N. Max Dunning, 71, architectural adviser to the commissioner of the Public Buildings Administration and one-time president of the Architectural League of America, died in Washington, D. C., April 19. Mr. Dunning entered federal service in 1918 as a member of the requirements division of the United States Housing Corp. Mr. Dunning was named architectural adviser of the Reconstruction Finance Corp. in 1933 and the following year assistant director for housing in the Public Works Administration. He became architectural assistant to the PBA commissioner in 1939, later being made adviser.

Oscar W. Lanzendorf, 56, chief civilian post engineer at Camp Beale and former Sutter County engineer for 20 years, died Apr. 13 in Yuba City, Calif. Mr. Lanzendorf was a native of San Francisco.

Harold M. Ward, 73, for many years a designer of steel frame structures, died at Bloomfield, N. J., April 20. He began in the drafting department of Passaic Rolling Mills, Paterson, N. J., later he was with Hay Foundry & Iron Works, Newark, N. J., in the structural design department. He was one of the chief engineers of structural design for Milliken Brothers, Inc., New York, whose steel plant on Staten Island was later acquired by Bethlehem Steel Co. During the first world war, Mr. Ward was connected with the Carolina Ship Building Co., Wilmington, N. C. Later, he was chief engineer of structural design for Hedden Iron Works, Newark, N. J.

E. R. Rodenberg, civil engineer for the East Side Levee & Sanitary District for the past 25 years, East St. Louis, Ill., died April 13. Born in Mount Olive, Mr. Rodenberg had lived in East St. Louis the last 50 years.

Anthony Leon Auradou, 81, retired city engineer, died April 15, after nearly ten years of retirement from his three decades of service as a technical engineer for San Francisco, Calif.

William B. Deneen, 61, Bakersville, N. C., civil engineer, died April 13. He had been associated with the Western Maryland, Clinchfield, Winston-Salem Southbound, and Chesapeake and Ohio railroads. He had been with the Virginia and South Carolina state highway departments.

Sgt. Donald C. Black, former Chelan County engineer at Wenatchee, Wash., died March 20 in a hospital in England as a result of wounds suffered in action on the German front. He entered the service two years ago.

John Wendel Bollman, 79, died in Toledo, Ohio, April 10. He was active in engineering and civic work for many years, having designed a number of suburban developments in Toledo and Baltimore, Md.

Leo T. Downey, district engineer for the Maryland State Roads Commission, died at Cumberland, Md., on April 13.

Andrew P. Hartmann, 76, former city engineer of Yonkers, N. Y., died at Tuckahoe, N. Y., April 18. He was a graduate of Cooper Union and was a surveyor on the extension of Riverside Drive, New York City, 38 years ago.

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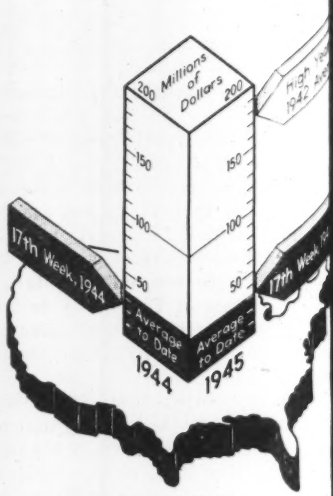
Navy appropriation bill passed by house

A $24.8 billion dollar Navy appropriations bill for the fiscal year 1946 was passed last Thursday by the House. The bill (H. R. 2907) provides $1,274,008,413 for new construction work. Of this amount, $986,000,000 is to be used for advance base construction and $288,000,000 for construction of yard, dock, and camp facilities in the continental U. S.

No breakdown of the work to be done in this country can be given at this time. The Navy had requested a larger sum and it will be some time before a decision will be made as to what projects will be carried on with the amount now expected to be appropriated. The Senate has not considered the bill as yet.

CONSTRUCTION ACTIVITY



As Reported This Week to... *Engineering News-Record*

CONTRACT VOLUME

Continental U. S. Only (Thousands of Dollars)

	Week of Apr. 26 1945	Cumulative 1945 (17 wk.)	Cumulative 1944 (17 wk.)
Federal	$22,524	$301,931	$415,...
State & Municipal	4,568	61,012	53,...
Total Public	$27,092	$362,943	$469,...
Total Private	5,240	157,643	123,...
U. S. Total	**$32,332**	**$520,586**	**$593,...**

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Type of Work	Dollar Volume (Thousands) This Week	Cumulative 1945 (17 wk.)	Cumulative 1944 (17 wk.)
Waterworks	$493	$11,730	$...
Sewerage	864	10,116	...
Bridges	...	7,938	...
Highways	4,414	40,656	...
Earthwork, Waterways	669	11,642	...
Buildings, Public	13,441	213,686	...
Industrial	2,244	112,843	...
Commercial	385	26,355	...
Unclassified	9,822	85,620	...

NOTE: Minimum size projects include are: Waterworks and waterways projects $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	1945 (17 wk.)	Cumulative 1944 (17 wk.)
NON-FEDERAL	$201,556	$158,...
Corporate Securities	48,024	63,...
State and Municipal	132,632	36,...
RFC Loans	20,900	52,...
FEDERAL	$ 77,137	$205,...
Total Capital	**$278,693**	**$365,...**

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	Apr. '45	306.43	147....
Building Cost	Apr. '45	238.46	125....
Volume	Mar. '45	103	45

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *SCOTT McLEOD, Statistics* *J. A. MAHONEY, Reports*

(Daily service also available—Write for details)

WATER SUPPLY

PROPOSED WORK

Okla., Edmond—Salt Water Disposal Assn., Edmond, making plans salt water gathering sys. and pump. stations to pump salt water back into ground, $60,000.

Tex., Frankston—City, R. Perry, mayor, City Hall, exten., imprv. WW. $20,250. Bond election soon.

★**Tex., Houston**—San Jacinto River Water Supply, Harris Co., Court House, plans nearing completion 3 year period pump. station, two 5 m.g. reservoirs, $700,000; dam at Cleveland, $4,500,000; 26 mi. open ditch canals, $1,500,000; drainage, $1,000,000. Freese & Nichols, Haile & McClendon, 2807 San Jacinto St., engrs.

Alta., Calgary—Municipality, plans waterworks in Rosedale sub-division. $22,000.

Alta., Drumheller—Municipality, c/o H. A. Brown, city clk., Drumheller, watermain replacements.

N. B., Hartland—Municipality, c/o Mayor C. R. Allen, Hartland, watermain and domestic supply to new residential section extend. from Hillcrest Ave. to Rockland Rd. $20,000.

Ont., Chatham—City, City Hall, made plans filtration plant. $175,000.

Ont., Cochrane—Town, increasing water supply, installing water treatment processing unit. About $128,000.

Ont., Deloro—Municipality, WW sys. $30,000. M. Hemphill, c/o Deloro Smelting & Refining Co. Ltd., Deloro, engr. CD 4/14/44.

Ont., Hamilton—Municipality, watermains, domestic connections to Parkdale and Hollywood Heights sections of Saltfleet Twp. $40,000. W. L. McFaul, City Hall, engr.

Ont., Little Current—Municipality, water supply sys. $40,000. James, Proctor & Redfern, Ltd., 36 Toronto St., Toronto, water supply sys. $40,000.

Ont., Paisley—Municipality, WW sys. $35,000. E. Friar, Town Hall, engr.

Ont., Stratford—Municipality, exten. water facilities, $19,000. W. H. Riehl, City Hall, engr.

Que., Baie Comeau—Municipality, WW exten., $25,000. A. Babitt, Town Hall, engr.

Que., Beaupre — Municipality, G. Godbout, clk., water sys. $50,000.

Que., St. Jacques De Pules—Town of St. Jacques de Pules, J. J. Crete, mayor, J. E. Boisvert, secy., domestic WW service imprvs., incl. concrete dam, 1 reservoir, 4 in. c.i. pipe, 1,325 lin. ft. steel pipe, 3,675 lin. ft. 3 in. steel pipe, 100 services and valves. $32,000. R. Morrissette, 15 Longvale St., Cap de la Madeleine, engr.

Que., St. Laurent (Postal Dist. Montreal)—City, H. Lapointe, clk., watermains, services in recently opened streets, $20,000. J. Dussault, Town Hall, engr.

Que., Val d'Or—Municipality, watermains in east and west sections of town, imprv. St. Gabriel Supply-Stone Reservoir. $90,000. E. A. Duimet, Val d'Or, engr.

Sask., Kindersley — Municipality, underground supply of water, $50,000. J. Jnox, Jr., Town Hall, engr. CD 11/21—ENR 11/30.

Sask., Saskatoon — Municipality, watermains in Second Ave., 33, and Osler Sts. etc. $60,000. G. D. Archibald, City Hall, engr.

Sask., Scott — Municipality, watermain extens., purchasing motor pumps, etc. $35,000. M. Miller, Town Hall, engr.

BIDS ASKED

Bids Asked April 30

Conn., Hartford—Bd. Contract & Supply, Metropolitan Dist., 650 Main St., Hartford, $50 16 in. cement lined c.i. pipe.

Bids Asked May 1

Wis., Oconto—City, E. Krueger, clk., 1 story, 29 x 36 ft., pump. station, Chicago St., 1 story, 14 x 18 ft. pump. station, Madison Well, 150,000 gal. elevated steel storage tank. McMahon Engrg. Co., Menasha, engrs.

Bids Asked May 3

†**Tex., Houston**—Federal Works Agency, 911 U. S. Appraisers Store Bldg., 7300 Wingate St., water imprvs. in housing area, Tex. 41-664-F. Plans deposit $25.

Location of ENR Correspondents

Symbols and Abbreviations Include:

† Federal Government
★ Project of $500,000 or over
ENR Engineering News-Record
CD Engineering News-Record Construction Daily

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger; water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Name in order of Listing)

Water Supply — Latin America
Sewers, Waste Disposal — Public Buildings
Bridges — Commercial Buildings
Streets & Roads
Earthwork, Waterways — Industrial Buildings
Unclassified

Stages Reported

PROPOSED: (except Streets & Roads); BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR);

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Wis., Brokaw—Village, B. G. Brookhyser, clk., pump. station, water and sewerage sys., $64,000. Plans deposit $10. from engineers. Foth, Boyd & Porath, 409 E. Walnut St., Green Bay, engrs. CD 4/18.

Bids Asked May 11

†**Md., Hyattsville**—Washington Suburban Sanitary Comn., Hamilton St., furnishing materials for and erecting welded steel standpipe for storing water, 4 m.g. capacity, having 151 ft. diam. and 31 ft. high, Contr. 186-W. H. R. Hall, ch. engr.; adv. ENR 4/26.

Bids Asked May 15

Tex., Garland—City, 250,000 gal. elevated steel water tank. Over $15,000. H. B. Gieb, Texas Bank Bldg., Dallas, engr.

LOW BIDDERS

Conn., Rocky Hill—State Comptroller, State Office Bldg., Hartford, Apr. 16, watermains, sanitary and storm sewers, utilities, Veterans Hospital, from White Oak Excavators, Inc., 59 E. Main St., Plainville, **$28,300.** CD 4/4—ENR 4/12.

★†**Okla., Oklahoma City**—E. M. Simon, city clk., City Hall, Apr. 17, 15 m.g.p.d. water purification plant and pump. station, at Bluff Creek, near here, from Lippert Bros., 2026 N.W. 23 St., **$1,069,966.** Est. $940,000. **FWA.** CD 3/27—ENR 3/29.

La., New Orleans—Sewerage & Water Bd. of New Orleans, 526 Carondelet St., clear water reservoir for Algiers Purification Plant, from Boh Bros. Constr. Co., 2400 Cypress St., New Orleans, **$204,989.** CD 4/11—ENR 4/19.

CONTRACTS AWARDED

Ind., Anderson—City Water Dpt., City Hall, water line exten., larger mains, to Omer Brandon & Son, Tell City, **$35,000.** Est. $42,000. V. Lee, City Hall, city engr.

†**Kan., Sherman Field (br. Leavenworth)**—U. S. Eng., 612 Federal Bldg., Louisville, Ky., pump. plants, Contr. No. W-23-028-eng-773, to L. G. Barcus & Sons, 1051 State St., Kansas City, Kan., **$29,614.**

★**Ky., Louisville**—Louisville Water Co., B. E. Payne, ch. engr. and supt., 435 S. 3 St., water treatment plant, (Div. A) two 200x200 ft. rein.-con., clarifier and mixer basins, brick, concrete chemical house and other work, to S. N. Nielsen Co., 3059 W. Augusta Blvd., Chicago, Ill., **$660,000*****(Div. B) chemical handling equip., to Brady Conveyor Corp., 20 W. Jackson Blvd., Chicago, Ill., **$16,600*****(Div. C) chemical feed equip., to Roberts Filter Mfg. Co., Darby, Pa., **$61,380*****(Div. D) orifice meter, to Simplex Valve & Meter Co., 68 and Upland Sts., Phila., Pa., **$2,794*****(Div. E) sluice gates and gates, to Chapman Valve Co., 835 W. Washington St., Chicago, Ill., **$6,167*****(Div. F) mixing and clarifier equip., to Link Belt Co., Starks Bldg., Louisville, **$28,120*****(Div. G) CO_2 equip., to J. J. Nolan Co., 78 Washington Ave., Memphis, Tenn., **$39,600.** Grand total $814,661. CD 3/8—ENR 3/15.

†**O., Shelby**—U. S. Eng., 925 New Federal Bldg., Pittsburgh, Pa., erecting of 50,000 gal. wood water tank, etc., Contr. No. W-36-058-eng-1267, Parsel Army Air Field Supply Depot, near here, to W. E. Caldwell Co., 200 E. Brandies St., Louisville, Ky., **$14,708.**

Tex., Dallas—City, City Hall, 12 and 8 in. c.i. watermains, from Yale to Pecan Rd., to F. S. Oldt Co., 403 S. Haskell St., approx. **$15,000.** CD 4/17—ENR 4/19.

Tex., Houston—Jno. F. Scott, Commerce Bldg., Houston, water facilities for 210 acre sub-division, own forces, over **$15,000.** CD 11/24—ENR 11/30.

†**Tex., Temple**—City, A. E. Taylor, mgr., Temple, WW imprvs., Tex. 41-708-N, Schedule A, to W. G. Cullum & Co., Great National Life Bldg., Dallas, **$15,000;** Schedule B, to Ross, Anglin & Field, Temple, **$26,135 FWA.** CD 4/17—ENR 4/19.

Tex., Vickery—C. S. Dawley & Associates, 3724 Potomac St., laying c.i. watermains. Owner builds. **$16,400.**

SEWERS, WASTE DISPOSAL

PROPOSED WORK

Calif., Los Angeles—Los Angeles Co., Hall of Records, sanitary sewers in Marcelle St. and other streets, Clearwater vicinity, $26,400. C.I. 1124. A. Jones, Hall of Records, co. engr.

Conn., Ansonia—City Advisory Comn., City Hall, sewage disposal plant, $400,000. V. B. Clarke, 356 Main St., engr.

Kan., Newton—City, W. O. Cuthbertson, mgr., City Hall, voted bonds incinerator, $60,000.

Tex., Dallas—Dallas County Water Control & Imprvt. Dist. 3, c/o Judge, Court House, bond election in May, sewerage sys. $135,000; disposal plant, $75,000.

Wis., Wittenberg—City, A. Krohn, clk., sewage treatment plant. $25,000. J. Donohue Engrg. Co., 608 N. 8 St., Sheboygan, engr.

Alta., Drumheller—Municipality, c/o H. A. Brown, city clk., storm sewers, $25,000.

N. B., Hartland — Municipality, main sewers, domestic connection to new residential section Hillcrest Ave. $30,000.

N. S., Glace Bay—Municipality, sewers, exten., $25,000.

SEWERS (Proposed Work, Cont'd.)

N. S., Liverpool—Municipality, sewers. $25,000. W. F. Dechman, Town Hall, engr.

Ont., Deloro—Municipality, sewerage sys. $35,000. M. Hemphill, c/o Deloro Smelting & Refining Co., Ltd., Deloro, engr.

Ont., Hamilton—Municipality, sewers and home connections to Parkdale and Hollywood Heights sections of Salt Fleet Twp. $45,000. W. L. McFaul, City Hall, engr.

Ont., Ripley—Municipality, G. H. Ruttle, clk., drainage sys. and public comfort station.

Que., Baie Comeau—Municipality, sewers exten., $35,000. A. Babin, Town Hall, engr.

Que., Joliette—City, City Hall, incinerator. $40,000.

Que., Rouyn—Municipality, collector sewer. $25,000. W. Bouchard, Rouyn, engr.

Que., St. Laurent (Postal Dist. Montreal)—City, c/o H. Lapointe, clk., City Hall, sewers in several recently opened streets, $25,000. J. Dussault, Town Hall, engr.

Que., Val d'Or—Municipality, sewers east and west sections of town. $75,000. E. A. Guimet, Town Hall, engr.

Sask., Kindersley—Municipality, storm sewer exten., ditching and new culverts, $25,000. John Knox, Jr., Town Hall, engr.

Sask., Saskatoon—Municipality, sewers in 23 St., Victoria Ave. and College St., etc. $55,000. G. D. Archibald, City Hall, engr.

BIDS ASKED

Bids Asked May 2

Ont., Lesside (Postal Dist. Toronto)—Secy. Dpt. P. Wks., Ottawa, sewers, watermains at Health and Occupational Centre. $50,000. Plans deposit $15.

Bids Asked May 3

†Tex., Houston—Federal Works Agency, 311 U. S. Appraisers Store Bldg., 7300 Wingate St., sanitary sewer imprvs., Tex. 41-684-F. Over $25,000. **FWA.** Plans deposit $25.

Bids Asked May 8

†Fla., Pensacola—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., sewage treatment plant on site of housing Fla. 8219, near here. Yonge & Hart, Thiesen Bldg., engrs.

Miss., Woodville—Town, Mayor's Office, Town Hall, sewage treatment plant, consisting of bar screen, Imhoff tank, 3 trickling filters, sludge beds, tool house, fence and other incidental and appurtenant items of work, 18,283 lin. ft. 8- to 12-in. collection sys., house connections, 54 manholes and 21 lampholes, 1,020 lin. ft. 2 in. water pipe. $75,000-$90,000. J. Wesley Brown, Beard Bldg., McComb, engr. CD 8/31—ENR 9/7.

Va., Richmond—At office of J. W. Huffman, city purch. agt., 219 Governor St., 26,000 lin. ft. 8- to 48-in. concrete combined sewers, etc., in Montrose Heights section. Plans deposit $5; adv. ENR 4/26.

LOW BIDDERS

†Calif., Vallejo—City of Vallejo and Solano Co., City Hall, Apr. 18, interceptor and outfall sewer in South Vallejo, Calif. 4-618-F, from Stolte, Inc., 8451 San Leandro St., Oakland, **$150,440. FWA.** CD 4/9.

Ill., Urbana—Urbana & Champaign Sanitary Dist., Urbana, Apr. 16, sewage treatment plant, from King & Petrie, Champaign, **$49,175.** Greeley & Hansen, 6 N. Michigan Ave., Chicago, engrs. CD 4/6.

Tex., Dallas—City, E. Goforth, secy., 8- to 15-in. sanitary sewer mains between Hollywood St. and Hampton Rd., south of Tate St., along Hampton Rd. and Sharon St. to Ravinia Dr. and along Ravinia Dr. to alley north of Sharon St., from Ben Sira & Co., 3901 Elm St., **$25,233.**

†Tex., Houston—City, M. H. Westerman, secy., City Hall, Apr. 18, sanitary sewer main serving Naval Hospital on S. MacGregor, Grand Blvd. and Reo Sts., Tex. 41-712-N, from Knutson Constr. Co., 2223 Commerce Bldg., **$95,506. FWA.** CD 4/9.

†Virginia—Div. Engr., Federal Works Agency, Lemon Bldg., 1729 New York Ave. N.W., Wash. 25, D. C., Apr. 17, Va. 44-408-1, sewer exten. in Hampton Roads Sanitation Dist., Warwick and Elizabeth City Counties. Sect. E, from C. H. Lawson, Williamsburg, **$163,494*****Sect. F, from A. S. Mundy Co., Woodbridge, N. J., **$49,437*****Sect. G, from A. G. Pinkston Co., Old Kirn Bldg., Portsmouth, **$139,719*****Sect. H, from Calnaught Constr. Co., 328 Detroit Ave., Portsmouth, **$84,665.** CD 4/5—ENR 4/12.

CONTRACTS AWARDED

Tex., Dallas—Idlewild Addition, c/o Capt. A. C. Aechternacht, 4308 Caruth Blvd., sanitary sewers. Owner builds. **$25,000.** CD 2/14—ENR 2/22.

Tex., Houston—Jno. F. Scott, Commerce Bldg., Houston, sanitary sewers, sub-division development, own forces, **$25,000.** CD 11/24—ENR 11/30.

Wash., Pasco—City, City Hall, exten. 17,000 ft. 8- to 15-in. sewerage sys., to Matt Malaspina & Co., 1901 23 Ave. S., Seattle, Zone 44, **$41,286.** Bids 4/17. John W. Cunningham & Assoiates, Spalding Bldg., Portland, Ore., engr.

Que., LaSalle—Town, A. Gravel, secy., sewers in Dist. 3, to A. Boisvert, 6000 Third Ave., Rosemount, approx. **$112,000.** A. Latour, c/o owner, engr.

BRIDGES

PROPOSED WORK

Connecticut—State, Wm. J. Cox, hy. comr. Hartford, completion Charter Oak Bridge, ramps, Prospect and Commerce Sts. (2) and approaches from Hudson St. and underneath bridges over Park River Conduit, Hartford.

Ont., Fort Erie—New York Central Sys., S. E. Armstrong, ch. engr., 466 Lexington Ave., New York, N. Y., overhead bridge over Central Ave. $60,000.

BIDS ASKED

Bids Asked May 1

Iowa—State Hy. Comn., Ames, maintenance culvert and intake flumes M-4297, Pottawattamie Co.; raising floor overhead bridge, U. S. 30, at Cedar Rapids, M-6212, Linn Co.; raising floor overhead bridge, Emerson, M-4328, Mills Co. F. R. White, Ames, ch. engr.

Maryland—State Roads Comn., Baltimore, widening double 15 ft. span concrete culvert over branch of Corsica River on U. S. Route 214, Contr. Q-197-1-211, Queen Anne Co.; widening 16 ft. span, concrete slab bridge over Beards Creek on Central Ave., reincon. extens. to provide 28 ft. roadway Contr. AA335-3-311, Anne Arundel Co.; constructing roadway surface on swing span of Dover Bridge over Choptank River, Contr. Co., 170-1-211 and T-103-1-211, Caroline and Talbott Counties. Plans deposit $5 each.

Bids Asked May 2

Louisiana—Dpt. Hys., D. Y. Smith, dir., Baton Rouge, three 19 ft. I-beam span bridge over Drainage Canal (Plain Dealing), concrete approaches, etc., 0.018 mi. State Route 70, S.P. 83-04-6, Bossier Parish. Plans deposit $2.

Bids Asked May 4

Mass., Dennis and Yarmouth—Bds. Selectmen of Dennis and Yarmouth and State Dpt. P. Wks., 100 Nashua St., Boston, repairing approaches to Upper County Bass River Bridge. $4,000. Plans deposit $5.

Bids Asked May 15

West Virginia—State Road Comn., Charleston, revising grade and widening Bridges 1167, 1172 and 1182 on Henderson-Winfield Rd. (State Route 17), S. P. 3420, Putnam Co.

Bids Asked May 23

Louisiana—State Hy. Dpt., D. Y. Smith, dir., New Orleans, repairing Industrial Canal Bridge, New Orleans-Chef Menteur Hy., State Route 2, S.P. 6-04-20, Orleans Parish. Plans deposit $2.

STREETS AND ROADS

BIDS ASKED

Bids Asked April 30

N. Y., New York—Comr. Parks, Dpt. Parks, the Arsenal Bldg., Central Park, 64 St. and 5th Ave., Zone 21, reconstructing portions of exterior sidewalk along Southern Blvd. between 183 St. and Fordham Rd., Bronx Park, Contr. X-2-145.

Bids Asked May 1

Maryland—State Roads Comn., 108 E. Lexington St., Baltimore, asphaltic concrete base course and wearing course 4 mi. hy. along Baltimore Washington Blvd. from south end Dead Mans Curve toward Laurel, Contr. Ho-219-2-311, Howard Co. Plans deposit $5.

N. Y., New York—President Manhattan Boro, Municipal Bldg., Zone 7, Contr. 6, setting, resetting curb at various locations; 3 in. sheet asphalt on existing concrete paving Park Ave. from 64 to 79 Sts.

Iowa—State Hy. Comn., Ames, maintenance resurfacing 11.6 mi. Iowa 60 from Streepyville to Missouri State Line, 10 mi. Iowa 142 from Missouri State Line to Iowa 2, 5.4 mi. Iowa 216 from Exline to Iowa 60, 4 mi. Iowa 277 from Numa to Iowa 60, 5.6 mi. Iowa 369 from Unionville to Iowa 2, M-5283, Appanoose Co.; 10.5 mi. Iowa 221, from Sect. 29-92-38 to U. S. 61, 8.6 mi. Iowa 110 from Sac Co. to Storm Lake, M-3348, Buena Vista Co.; 8 mi. Iowa 14 from Allison to end of pavement north of Parkersburg, 2 mi. Iowa 326 from Bristow to Iowa 10, stockpiles on Iowa 14 and Iowa 326, M-2241, Butler Co.; 5 mi. Iowa 217 from Breda to U. S. 71, 0.7 mi. Iowa 285 from Arcadia to U. S. 30, 9.9 mi. Iowa 286 from Lanesboro to U. S. 30, M-1317, Carroll Co.; 12.4 mi. Iowa 273 from Lake Wapello to U. S. 63, M-5284, Davis Co.; 6.9 mi. Iowa 99 from Kingston to Louisa Co.; 2.6 mi. Iowa 16 from Burlington to Ordnance Plant, M-5285, Des Moines Co.; 5.5 mi. Iowa 78 from Winfield to Louisa Co. line; 3.8 mi. Iowa 133 from Mt. Pleasant to Oakland Mills, M-5286, Henry Co.; 21.3 mi. Iowa 16 from U. S. 61 to U. S. 218 and from Augusta to Ordnance Plant, 7.8 mi. Iowa 38 from Denmark to Fort Madison, 6 mi. Iowa 103 from West Point to U. S. 218, M-5287, Lee Co.; 10.1 mi. Iowa 78 from Henry Co. to U. S. 61, 4.7 mi. Iowa 76 from Columbus Junction to Sect. 7-76-4, 2.8 mi. Iowa 346 from Letts to U. S. 61, 5 mi. Iowa 99 from Wapello to Sect. 4-73.2, M-5288, Louisa Co.; 9.8 mi. U. S. 65, from Wayne Co. to U. S. 34, 0.9 mi. Iowa 306 from Derby to U. S. 65, 14.8 mi. Iowa 14, from Chariton to Wayne Co., and from Marion Co. to Iowa 253, 7 mi. Iowa 253 from Williamson to Iowa 14, M-5289, Lucas Co.; 16.9 mi. Iowa 22, from Blue Grass to Iowa 38, M-5290, Muscatine Co.; 4.4 mi. Iowa 110, from Schaller to Buena Vista Co. line, M-3349, Sac Co.; 12 mi. Iowa 16 from Iowa 1 to Iowa 270, 2.8 mi. Iowa 269 from Stockport to Iowa 16, 4.9 mi. Iowa 23 from Missouri State line to Iowa 2, 14.6 mi. Iowa 16 from Davis Co. to Iowa 1, 1 mi. Iowa 98 from Douds to Iowa 16, M-5291, Van Buren Co.; 24.5 mi. Iowa 1 from Brighton to Johnson Co., 8.3 mi. Iowa 81 from Wellman to Iowa 92, 22.9 mi. Iowa 22 from Keokuk Co. to Riverside from Lone Tree to U. S. 218, M-5292, Washington Co.; 7.6 mi. Iowa 14 from end of pavement to Lucas Co., 12.8 mi. U. S. 65 from Lineville to Iowa 2, M-5293, Wayne Co.; 14.6 mi. Iowa 175 from Dayton to Stratford, and from Gourie to Calhoun Co. line, 6 mi. Iowa 324 from Clare to Iowa 5, 13.3 mi. Iowa 50 from Lehigh to Callender, 0.5 mi. Iowa 121 from State Park to Iowa 50, M-1313, Webster Co. maintenance cover aggregate surfacing 3,600 cu. yd. in stockpiles on U. S. 65, from U. S. 69 to U. S. 34, M-1314, Warren and Lucas Counties; maintenance pavement reconstruction 1,524 sq. yd. various primary roads Cass and Pottawattamie Counties; 1.414 mi. road U. S. 6, M-1322, Jasper Co. F. R. White, Ames, ch. engr.

★**Ohio**—State Hy. Dpt., Columbus, asphaltic concrete resurfacing 1.929 mi. Sects. A, West Jefferson and J of SH 1, US 40, Franklin and Madison Counties, $40,000; 6.204 mi. Sects. N, M of SH 142, US 50 Huron Co., $77,700; 3.077 mi. Sect. G-1 of SH1, US 40, Licking Co., $46,800; 1.156 mi. Sects. F, Girard and M of SH 80, US 422 Trumbull Co., $27,100; 6.1 mi. Sects. A-1, A-2, A-3, B-1 and B-2 of SH 21, US 20 Williams Co., $114,200; asphaltic concrete retar concrete resurfacing 9.759 mi. Sects A, C-1, C-2, Mason, Lebanon and G of SH 6, US 42, Butler and Warren Counties, $151,040; 2.323 mi. Sects. G, D, H of SH 5, US 23 Scioto Co., $52,600; widening, asphaltic concrete resurfacing 4.381 mi. Sects. C-3, Carroll and C-1 of SH 49, US 33, Fairfield Co., $77,000; 4.22 mi. Sects. D and A of SH 129 Butler Co., $110,500; bituminous treating 29.698 mi. various sects. of SH Nos. 153, 475, 753, 151 and 13, Ashtabula Co., $68,106; 15.4 mi. Sects. SH Nos. 375, 377 and 627 Carroll and Columbiana Counties, $49,812; 43.08 mi. Sects. SH Nos. 498, 208, 170, 171, 579, and 262, Dake, Miami, Mercer and Shelby Counties, $84,844; 11.63 mi. various sects. of SH Nos. 420 and 425, Defiance and Paulding Counties, $36,160; 20.48 mi. various sects. of SH Nos. 594, 310 and 312, Fulton and Williams Counties, $50,259; 20.14 mi. various sects. of SH Nos. 182, 662, 184 and 183, Hamilton and Butler Counties, $32,994; 10.78 mi. various sects. of SH 875, VanWert Co., $32,050; 23.04 mi. various sects. of SH Nos. 273 and 529, Wood and Sandusky Counties, $42,065.

West Virginia—State Road Comn., Charleston, surface treatment 6 mi. Beddington-Scrabble Secondary Rd. (Secondary Route 12 & 5, State Secondary Project 5157, Berkeley Co.; 6.8 mi. State Route 4, at Frametown toward Rosedale Secondary Road (Secondary Route 9), S. P. 5399; 16.12 mi. Gassaway-Clay Co. line Rd. (State Route 4), S. P. 3157-A-B-C, Braxton Co.; 14 mi. Ona via Head Seven Mile Creek to near Dudley Gap Secondary Rd. (Secondary Routes 1 & 11), State Secondary Projects 5596 and 6130, Cabell Co.; 28.24 mi. Grantsville via Millstone to Clay Co. line Rd. (State Route 16), S. P. 3330, 3412, 3076, Calhoun Co.; 3.2 mi. U. S. Route 33, at Normantown up Steer Creek Secondary Rd. (Secondary Route 19), State Secondary Project 5638, Gilmer Co.; 37.93 mi. Moorefield via Baker to Virginia State line Rd. (State Routes 55 and 259), S. P. 3214, 3471 A & B, Hardy Co.; 5 mi. Sandyville-Liverpool Secondary Rd. (Secondary Route 13), State Secondary Project 5406, Jackson Co.; 8.65 mi. Standard Bridge-Fayette Co. line Secondary Rd. (Secondary Route 83 Paint Creek), State Secondary Project 5165; 6.2 mi. Big Tyler Mountain-Flatwood-Frye Secondary Rd. (Secondary Route 5), State Secondary Project 5077 and 5118, both Kanawha Co.; 4.42 mi. Tayler County to Gum Springs Rd. (U. S. Route 119), S. P. 239-A, Monongalia Co.; 11 mi. Greenville-Creamery-Summers Co. line Sec-

STREETS, etc. (Bids Asked, Cont'd.)

ondary Rd. (Secondary Routes 7, 7/1, 3/2), State Secondary Projects 5617, 5433 and 5626, Monroe Co.; 13.6 mi. Winchester Grade Junction Sec. 13/1 Hager's Store Secondary Rd. (Secondary Route 13), State Secondary Project 5543, Morgan Co.; 2 mi. Wheeling Streets (US Route 40), S. P. 2064-Pt. D. & E. 2063, 2064, Ohio Co.; 8.34 mi. Mouth of Seneca-Grant Co. line Rd. (State Route 4), S. P. 3530; 7.46 mi. Cherry Grove-Pocahontas Co. line Rd. (State Route 28), S. P. 4-2 and 3496, both Pendelton Co.; 8.51 mi. Thornwood-Pendleton Co. line Rd. (State Route 28), S. P. 3497; 4.73 mi. Durbin-Randolph Co. line Rd. (US Route 250), S. P. 3090, both Pocahontas Co.; 5 mi. Gandeville-Harmeny Secondary Rd. (Secondary Route 15), State Secondary Project 6353, Roane Co.; 3.4 mi. Creamery-Alderson Secondary Route (Secondary Route 15/1 and 15/3), State Secondary Project 5628, Summers Co.; 2.69 mi. Pence Springs to Lovell Rd. S. P. 1103, and 1.15 mi. Bellepoint Streets, S. P. 142-H, Summers Co.; 8.75 mi. Tyler Co. to Doddridge Co. line Rd. (State Route 23), S. P. 2237; 12 mi. State Route 18 to Dale-Secondary Rd. (Secondary Route 13-Indian Creek), State Secondary Project 5663, both Tyler Co.; 9.65 mi. Cowen toward Webster Springs Rd. (State Route 20) S. P. 168-B, Webster Co.; 11 mi. State Route 14 to Jackson Co. line Secondary Rd. State Secondary Project 5354, Wirt Co.; 9.1 mi. Glenn Morrison to Raleigh Co. line Secondary Rd. (Secondary Route 1), State Secondary Project 5018; 11.9 mi. Pineville-Baileysville Secondary Rd. (Secondary Route 9), State Secondary Projects, FAS 13 & 5239, both Wyoming Co.

Wisconsin — State Hy. Comn., Madison, gravel surfacing for shoulders 12 mi. A.F.E. No. 13-39, Madison-Portage Rd., U.S. Highway No. 51, 23 mi. A.F.E. No. 13-40, Madison-Edgerton Rd., U.S. Hy. No. 51, both Dane Co.; 8 mi. A.F.E. No. 14-30, Theresa-Fond du Lac Rd., U.S. Highway No. 41, Dodge Co.; 6 mi. A.F.E. No. 23-23, Monroe-New Glarus Rd., State Trunk Hy. No. 69; shoulder surfacing and producing and stock piling gravel surfacing 12 mi. A.F.E. No. 23-24, Monroe-South Wayne Rd., State Trunk Highway No. 11, gravel surfacing 4,100 cu. yd. Green Co.; Option "A" gravel surfacing for shoulders or Option "B" crushed stone surfacing for shoulders, 13,200 cu. yd. 6 mi. A.F.E. No. 5-18, Green Bay-Shawano Rd., State Trunk Highway No. 29, Brown Co.; 18,000 cu. yd., 13.6 mi. A.F.E. No. 44-26, Appleton-Waupaca Rd., U.S. Highway No. 10, Outagamie Co.; crushed stone surfacing 15.7 mi. A.F.E. No. 62-37, LaFarge-Hillsboro Rd., State Trunk Hy. No. 82, Vernon Co.; 22 mi. A.F.E. No. 12-24, Boscobel-Readstown Rd., U.S. Highway No. 61, Crawford Co.; 3 mi. A.F.E. No. 22-36 Illinois State Line-Dickeyville Rd., State Trunk Highway No. 35, Grant Co.; 5 mi. A.F.E. No. 25-33 Mineral Point-Lafayette County Line Rd., U.S. Highway No. 151, Iowa Co.; 7 mi. A.F.E. No. 33-30 Belmont-Iowa County Line Rd., U.S. Hy. No. 151, Lafayette Co.; 10.8 mi. A.F.E. No. 33-25, Argyle-Darlington Rd., State Trunk Highway No. 81, Lafayette Co.; gravel surfacing 7.6 mi. A.F.E. No. 16-12 Ashland-Superior Rd., U.S. Highway No. 2 and 53, 4.5 mi. A.F.E. No. 16-16 Manitou Falls-Superior Rd., State Trunk Highway No. 35, both Douglas Co.

Bids Asked May 2

Colorado—State Hy. Dpt., Denver, gravel surfacing, structures 4.147 mi. F.A.S. 365 W (1), on S.H. 115, El Paso Co. CD 4/10—ENR 4/12.

Bids Asked May 3

Ia., Sigourney—Bd. Supervs. Keokuk Co., Sigourney, surfacing, resurfacing 50 mi. various secondary roads, incl. 35,000 tons Class A crushed stone on road. Over $25,000. F. K. Brown, Sigourney, co. engr.

Tex., Houston—City, City Hall, ditching and dirt road work, over $15,000.

★**Ontario**—J. D. Millar, supt. Min. Dpt. Hys., Toronto, 363,000 tons crushed stone and gravel for various portions Kings Highway in different parts of province. About $600,000.

Bids Asked May 4

Mass., Falmouth—Bd. Selectmen of Falmouth at State Dpt. P. Wks., 100 Nashua St., Boston, repairing Beach and Nobsta Rds., Chap. 90, for Town, Barnstable Co. and State Dpt. P. Wks., 100 Nashua St., Boston. $30,000. Plans deposit $5.

Mass., Harwich—Bd. Selectment, at Office State Dpt. P. Wks., 100 Nashua St., Boston, repairing Lower County Rd. and Allen's Harbor Bridge Approaches, for Town, Barnstable Co. and State Dpt. P. Wks., 100 Nashua St., Boston. $4,000. Plans deposit $5.

Minnesota—State Hy. Dpt., St. Paul, road-mix bituminous wearing course 31 mi., Maintenance Dist. No. 2. Over $100,000. O. L. Kipp, ch. engr.

Bids Asked May 7

Minn., Virginia—State Hy. Dpt., District Office, Virginia, crush, screen, load and haul about 23,920 cu. yd. mineral aggregate for gravel surfacing and bituminous surface repairs; screen, load and haul about 15,486 cu. yd.; load and haul about 23,675 cu. yd. Over $40,000. O. L. Kipp, ch. engr.

Bids Asked May 8

†**California**—Pub. Roads Admin., 720 Phelan Bldg., San Francisco, constructing 5.7 mi. access road to Point Arguello, Naval Reservation and Coast Guard Life Boat Station, Santa Barbara Co. Chas. Norris, Phelan Bldg., San Francisco, div. engr.

Calif., Los Angeles—Los Angeles Co., Hall of Records, imprv. Clark and Cerritos Aves., Contr. 556, incl. 22,800 cu. yd. excav., 1,900 lin. ft. concrete curb., 490,400 sq. ft. permanent selected base. Over $25,000. O. F. Cooley, Hall of Records, engr.

Bids Asked May 9

California—State Div. Hys., Sacramento, placing plant mix surfacing over existing pavements and borders 2.9 mi. between 0.8 mi. west of Pennington Creek and Junction with Route 125, San Luis Obispo Co.; constructing rein.-con., cribbing and restoring portion roadbed about 2.5 mi. east of Jarboe Pass, Butte Co.; placing plant mix surfacing on imported base material and applying seal coat to plant mix surfacing and prime coat on shoulders 7.5 mi. between Loleta and Patricks Point, Humboldt Co. G. T. McCoy, state hy. engr.

Bids Asked May 11

Kentucky—Dpt. Hys., Frankfort, bituminous resurfacing 0.61 mi. Glasgow-Tompkinsville Rd., Ky. 63, SP 5-92, Barren Co.; 7.141 mi. Hitchens-Webbville Rd., Ky. 1, SP 22-48, Carter Co.; 7.938 mi. Martin-Wheelwright Junction Rd., Ky. 122, SP 36-76, Floyd Co.; 9.439 mi. Morehead-Sandy Hook Rd., Ky. 32, SP 103-42, Rowan Co.; bituminous concrete widening and wedge course 5.6 mi. Munfordville-Elizabethtown Rd., U.S 31-W, SP 50-20, Hart Co.; 3.362 mi. US 31-W, Bowling Green-Russellville Rd., and rock asphalt seal 0.511 mi. State St. from Eighth to 130 ft. south of Twelfth, College St. from Main to Tenth, SP 114-248, 114-338, 114-168, 114-188, U. S. 3-W and Ky. 71 in Bowling Green, Warren Co.; grading, draining, traffic bound surfacing 0.265 mi. Madisonville-Dixon Rd., U. S. 41, SP 54-340, Hopkins Co.; rock asphalt seal 17.05 mi. Liberty-Jamestown-Albany Rd., Ky. 35, SP 104-18, 104-38, 104-78, 104-98, Russell Co.; bituminous seal coat 4.3 mi. portion Berlin-Augusta Rd., RH-1028; 5.2 mi. Lenoxburg-Foster Rd., RH 1031; 5.6 mi. Sharon Rd., RH 1032, all foregoing Bracken Co.; bituminous surfacing 2.9 mi. north portion of Four Mile and Twelve Mile Rd., RH 1014; 1.8 mi. Ten Mile Rd., RH 1018; bituminous plant surfacing 0.32 mi. Sixth St. Fill Road, RH 1102, all foregoing Campbell Co.; 2.1 mi. Bromley-High Level Rd., RH 1012; 4.4 mi. Richardson Rd., RH 1023; 0.95 mi. Henry Clay Ave., RH 1079, all foregoing Kenton Co.; all rural Highway Projects Group 1 (1945); bituminous resurfacing 29.49 mi. Lawrenceburg-Taylorsville Ky. 44, SP 3-171, 108-47, 106-126, 108-7, 108-127; 12.905 mi. Ky. 53, Mt. Eden-Shelbyville Rd., SP 106-126, Anderson, Shelby, and Spencer Counties, Group 20 (1945); bituminous resurfacing and rock asphalt seal 10.135 mi. Shelbyville-Eminence Rd., Ky. 55, SP 106-6, 4.7 mi. Shelbyville-North Pleasureville Rd. SP 106-66, Ky. 43, and 3.884 mi. from Cropper to junction with Ky. 37 near Henry Co. Line; rock asphalt seal 5.765 mi. Shelbyville-LaGrange Rd., Ky. 53, SP 106-246, 8.75 mi. New Castle-Frankfort Rd. SP 52-172, 52-107, 106-46, Ky. 37, all foregoing Henry and Shelby Counties, Group 21 (1945); bituminous resurfacing 11 mi. Lexington-Cincinnati Rd., SP 8-10, 59-115, 41-14, US 25, 0.711 mi. Walton-Nicholson Rd., SP 8-30, Ky. 16, both Boone, Kenton and Grant Counties, Group 23 (1945); cement concrete pavement repair 0.065 mi. London-Corbin Rd., SP 63-11, U. S. 25, 0.582 mi. Corbin-Barbourville Rd., SP 61-10, U. S. 25-E, 19.695 mi. Corbin-Williamsburg Rd., SP 118-20, 118-180, 118-220, U. S. 25-W, all foregoing Laurel, Knox and Whitley Counties, Group 28 (1945).

Tennessee—State Hy. Dpt., Nashville, reconditioning surfacing 9.5 mi. north of Route 2 to Warren Co. line, Sect. A; 12 mi. from Coffee Co. line to intersection of Route 1 at McMinnville, Sect. B, both S.A.P. 585, Coffee and Warren Counties; 15.6 mi. from Clarksville to Stewart Co. line, Sect. A; 5.9 mi. from Montgomery Co. line to intersection of Route 120, Sect. B; 6 mi. from intersection of Route 76 north, Sect. C, all foregoing State Route 120, S.A.P. 586, Stewart and Montgomery Counties; 14.7 mi. from Centerville west on Route 100, Sect. A, State Routes 48 and 100; 7.4 mi. from Hickman Co. line to intersection of Routes 13 and 20 in Linden, Sect. B, State Routes 100 and 13; 13.5 mi. from intersection of Routes 12 and 20 in Linden to Lewis Co. line, Sect. C, all foregoing State Routes 13 and 20, S.A.P. 587, Perry and Hickman Counties; 9 mi. Route 109 from point 8.9 mi. north of Gallatin to intersection of State Route 41, S.P.A. 588, Sumner Co.; 13 mi. State Route 26 from Liberty to Smithville, and Route 56 through Smithville, Sect. A; 6.9 mi. State Route 42 from Cookeville to Overton Co. line, Sect. B, both S.A.P. 589, DeKalb and Putnam Counties; 7.2 mi. State Route 53 from Smith Co. line toward Gainesboro, Sect. A; 12 mi. State Route 52 from Macon Co. line to Moss, Sect. B, both S.A.P. 590, Jackson and Clay Counties; 7.9 mi. State Route 62 from intersection of Route 29 to Wartburg to intersection of Route 116, S.A.P. 591, Morgan Co.; 5 mi. State Route 33 from intersection of Route 32 east, toward Sneedsville, Sect. A, S.A.P. 592, Claiborne Co.; 12.1 mi. State Route 35 from East City Limits of Newport to Greene Co. line, Sect. A, S.A.P. 593, Cocke Co. L. N. Means, Nashville, office engr.

Bids Asked May 15

Pennsylvania — State Hy. Dpt., J. U. Shroyer, sec.; Harrisburg, bituminous surfacing 7,153 ft. Legislative R-120, Traffic Rts. 22 and 30, Allegheny Co.; existing pavement surfacing and plain concrete base, bituminous surface replacement 6,124 ft. Application 294, Sect. 4, Application 3955, Traffic R-930, Aliquippa Borough, Beaver Co.; bituminous surfacing 5,201 ft. Legislative R-59, Sec. 21, Legislative R-17014, Sect. 1, Traffic R-322, Lawrence and Sandy Twps., Clearfield Borough, Clearfield Co.; 8,630 ft. Legislative R-42008, R-42010, Sect. 1, R-756, Sect. 2, Application 500, Sec. 1, Traffic R-346, Bradford Twp., city of Bradford, Lewis Run Borough, McKean Co.; existing pavement surfacing and bituminous surfacing reconstruction, etc. 12,345 ft. Leg. Rt. 142, Sect. 13, T.R. 30, Montgomery Co.; bituminous surfacing, widening 3,183 Legislative R-212, Sect. 4-A, Traffic R-6, Tioga Co.; repairing 30 ft. bridge Leg. Rt. 23062, Upper Darby Twp., Deleware Co.; 104 ft., Route 26018, Brownsville and Jefferson Twps., Fayette Co.

Bids Asked

Iowa—State Hy. Comn., Ames, rejected bids Apr. 17, imprv. 10.2 mi. Cedar Co.; 3.95 mi. Crawford Co.; Proj. M-1322, Jasper Co.; received no bids imprv. 12.1 mi. Ida Co.; 7.2 mi. Grundy Co. CD 4/10—ENR 4/12.

Ia., Hampton—Bd. Supervs. Franklin Co., rejected bids Apr. 13, grading, incidental work, 19.971 mi. secondary roads. Will readvertise. C. P. Rudiall, Hampton, co. engr.

Ia., Maquoketa—Bd. Supervs. Jackson Co., Maquoketa, rejected bids Apr. 12, maintenance surfacing 89.12 mi. various secondary roads. Will readvertise. C. C. Bowman, Maquoketa, co. engr. CD 3/23—ENR 3/29.

LOW BIDDERS

California—State Div. Hys., Sacramento, Apr. 18, plant mix resurfacing on existing roadbed and constructing shoulders of imported borrow on portions 7.1 mi. road between Roseville and Lincoln, Placer Co., from R. A. Westbrook, 1331 C St., Sacramento, **$41,815.** G. T. McCoy, state hy. engr.

California—State Div. Hys., Sacramento, Apr. 11, imprv. 13.5 mi. Tulare Co., from Brown, Doko & Baun, Dollivar St., Pismo Beach, **$118,504.** CD 3/26—ENR 3/29.

Conn., Rocky Hill—State Comptroller, 114 State Office Bldg., Hartford, Apr. 16, grading and road works, hospital grounds, Veterans Hospital, from White Oak Excavators, Inc., 59 East Main St., Plainville, **$28,300.** Buck & Buck, 650 Main St., Hartford, engrs. CD 4/4—ENR 4/12.

★**Georgia**—State Hy. Dpt., Atlanta, Apr. 18, from McDougald Constr. Co., Northside Dr. N.W., Atlanta, imprv. 5 mi. Hancock Co. **$32,339**:, resurfacing 9.05 mi. Tift Co. **$24,581**; 13.6 mi. Jasper Co. **$33,425***** from E. Jack Smith, Hurt Bldg., Atlanta, 10.6 mi. Jenkins Co. **$45,039**; 10 mi. Liberty Co. **$87,004**; 12 mi. Peach and Houston Counties **$80,979*****from Espy Paving & Constr. Co., 108 E. Bay St., Savannah, 2 mi. Chatham Co. **$26,756*****from Hardaway Contg. Co., 15 11 St. Columbus, 28 mi. rd. Baker and Miller Counties **$47,047*****from R. B. Tyler Co., 1446 Levering St. Louisville, Ky., 6.3 mi. Talbot Co. **$41,605*****from E. H. Hines, Greenwood, S. C., 8 mi. Newton and Rockdale Counties **$46,109*****from Ledbetter-Johnson, Rome, 7.1 mi. Catoosa, Whitfield and Walker Counties **$60,393**; 19 mi. Whitfield and Cordon Counties **$368,441**; 4.87 mi. road 2.82 mi. road in Fannin Co. **$55,658** ***from S. Finley, 292 North Ave. N.W., Atlanta, 1.85 mi. rd. DeKalb Co. **$34,947*****from J. B. Gibson Constr. Co., Donalson, 18.6 mi. Calhoun and Dougherty Counties **$28,069.** CD 4/11.

Maryland—State Roads Comn., Baltimore, imprv. 3.02 mi. Baltimore Co., from American Paving & Constr. Co., 2525 Loch Raven Rd., Baltimore, slag **$121,260**; 3 mi. St. Mary's Co., from American Asphalt Production Co., 60 P St. S.E., Wash., D. C., **$44,279.** CD 4/12.

Mass., Boston—City Dpt. P. Wks., City Hall, Apr. 16, bituminous concrete pavement on Clarkson St., etc., from E. M. Carriere, Whitford St., Roslindale, **$36,758.** CD 4/11.

STREETS, etc. (Low Bidders, Cont'd.)

Mass., Boston—City, City Hall, Apr. 17, artificial stone sidewalks on Cummins Hy., etc., from Rufo Constr. Co., 5 Allen Rd., Brighton, **$26,083.** CD 4/11.

★**New York**—Dpt. P. Wks., State Office Bldg., Albany, Apr. 11, imprv. 28 mi. Chautauqua Co., from Warren Bros. Road Co., 38 Memorial Dr., Boston, Mass., **$583,323.** CD 3/26—ENR 3/29.

North Dakota—State Hy. Comn., Bismarck, Apr. 20, imprv. 0.243 mi. Dunn Co., and 0.681 mi. Grant and Sioux Counties, from Northwestern Engineering Co., Rapid City, S. D., **$28,993** and **$34,577** respectively ***7.062 mi. Grant, Hettinger, Sioux, Morton and McLean Counties, to W. H. Noel Co., Jamestown, **$113,844.** Rejected bids imprv. 0.34 mi. Oliver Co.; SAP 283, 391D, 283B and 260H, 305BC, 306A, 174AB, Billings, Stark, Morton, Kidder and Burleigh Counties.

Okla., Oklahoma City—City, E. M. Simon, City Hall, grading, drainage, paving 9 residence blocks, from Banta Constr. Co., 1226 N.W. 4 St., **$74,575.** R. Lee, Jr., City Hall, engr.

Tex., Houston—City, M. H. Westerman, secy., City Hall, Apr. 18, repaving Broadway from La Porte Rd. to Elm St., from Brown & Root, Inc., P. O. Box 3, **$31,570.** Est. $33,000.

Tex., Houston—City, M. H. Westerman, sec., City Hall, Apr. 18, repaving Main St. from McKinney to Eagle Sts., from Brown & Root, Inc., P. O. Box 3, **$144,640.** Est. $154,000. CD 4/13—ENR 4/19.

Wash., Port Orchard—City, Hity Hall, Apr. 9, paving 4 blocks on Sidney Hill, from R. L. Moss, Zenith, **$36,073.** Parker & Hill, Smith Tower, 2 and Yesler Sts., Seattle, Zone 4, engrs.

Wisconsin—State Hy. Comn., Madison, Apr. 17, imprv. 14 mi. Sauk Co., from W. R. Dubolse & Son, Baraboo, **$30,870*****11.5 mi. Juneau Co. and 9.8 mi. Vernon Co., from E. Kraemer & Sons, Plain, **$39,100** and **$43,500** respectively***11.9 mi. Jackson and Trempealeau Counties, from Schultz Bros., Neillsville, **$67,570***4.5 mi. U. S. Hy. 12, 0.7 mi. U. S. Hy. 16, 8.3 mi. State Trunk Hy., Monroe Co., from O. Meyer, Sparta, **$24,715***** 12.9 mi. Trempealeau Co., from L. G. Arnold, Inc., Eau Claire, **$31,414***13 mi. Grant Co., from R. C. Wonn, Cobb, **$54,000.** CD 4/5—ENR 4/12.

†Alaska, Cordova — Civil Aeronautics Admin., Anchorage, 16 mi. gravel highway from Cordova to Cordova Airfield, from Morrison-Knudsen Co., Inc., 319 Bway., Boise, Idaho, **$127,000.**

CONTRACTS AWARDED

Georgia—State Hy. Bd., Atlanta, imprv. 1.492 mi. Laurens Co., and 4.881 mi. Bibb and Twigg Counties, to R. A. Bowen, Macon, **$27,222** and **$30,742** respectively; 6.18 mi. Coweta Co., to W. L. Cobb, Inc., Decatur, **$256,728.** Bids 4/11. CD 4/3—ENR 4/5.

Kansas—State Hy. Dpt., Winfield, imprv. Proj. WENR-6, Cowley Co., to L. V. Hites, 200 City Bank Bldg., Kansas City, Mo., **$59,115.** Bids 3/29, awarded 4/12. Rejected bids Mar. 29, Proj. WER-7, Cowley Co.; 0.264 mi. Cowley Co. CD 3/20—ENR 3/22.

Kan., Hugoton—City, D. M. Brubaker, clk., asphalt paving, to Broce Constr. Co., 214 S. 2 St., Dodge City, **$159,314.** Bids 4/3, F. E. Devlin, 2608 E. Kellog St., Wichita, engr.

Mass., Dorchester (P. O. Boston)—City, Dpt. P. Wks., City Hall Annex, Boston, imprv. Clarkson and other streets, to E. M. Carriere, 134 Whitford St., Roslindale, **$30,759.** Bids 4/16. CD 4/10—ENR 4/12.

†N. C., Camp Butner (br. Durham)—U. S. Eng., Post Office Bldg., Savannah, Ga., constructing, completing paving and ambulance platform and fire station, Contr. No. W-09-133-eng-598, to Wm. Muirhead Constr. Co., Durham, N. C., **$159,019.**

N. C., New Bern—Green Park, Inc., c/o T. Wilson, New Bern, asphaltic paving, curbing, guttering, drainage, to T. A. Loving & Co., Goldsboro, **$44,450.** Peirson & Whitman, Security Bank Bldg., Raleigh, engrs.

Tex., Andrews—Andrews Co., Andrews, road imprvs., to Plains Constr. Co., Pampa, **$124,184.** H. C. Dickson, Monahans, engr.

†Utah—U. S. Grazing Serv., Dpt. Interior, Walker Bank Bldg., Salt Lake City, constructing 7½ mi. access road connecting Huntington Canyon with railroad at Mohrland, own forces. **$228,500.**

Washington—State Hy. Dpt., Olympia, imprv. 1.59 mi. Cowlitz Co., to Parker-Schram, Couch Bldg., Portland, Ore., **$156,297.** Bids 4/17. CD 4/3—ENR 4/5.

West Virginia—State Rd. Comn., Charleston, to Middle State Bit. Corp., Ashland, Ky., imprv. 12.92 mi. Williamson Rd., **$37,259;** 10 mi. Belo Rd., **$27,714,** both Mingo Co.; 16.09 mi. Raleigh Co., **$56,093;** 18.5 mi. Wayne Co., **$56,062***to Murphy Constr. Co., Morgantown, 5.5 mi. Pocahontas Co., **$29,860;** 8.05 mi. Randolph Co., **$31,272;** 10 mi. Taylor Co., **$37,466***to Mirabile Constr. Co., Welch, 10.2 mi. McDowell Co., **$40,633***to Fuccy Bros., Weston, 6.75 mi. Preston Co., **$29,891***to Harley E. Calvin, Marietta, O., 3.7 mi. Wetzel Co., **$25,475***to Brown & Wright, Princeton, 7.49 mi. Wyoming Co., **$28,639.** Grand total $400,364. Bids 4/17. CD 4/9—ENR 4/12.

Wyoming—State Hy. Comn., Cheyenne, imprv. 39.588 mi. Converse and Campbell Counties, to H. W. Read, 706 W. 19 St., Cheyenne, **$245,016.** Bids 4/10. CD 4/3.

Alta., Calgary—Municipality, grading and street graveling in new Rosedale Section, day labor. **$26,300.**

N. B., Woodstock—Municipality, C. J. Jones, K. C., town clk., cement sidewalks, resurfacing asphalt pavements, Main, King and Queen Sts., day labor. **$35,000.** C. W. Gorman, Woodstock, engr.

N. S., Halifax—Dpt. Munitions & Supply, R. T. McDonald, secy., Ottawa, Ont., paving roads at Joint Service Magazine, to Standard Paving & Materials, Ltd., Harbour Commission Bldg., Toronto, Ont., **$278,019.**

Ont., Guelph—Wellington Co. Council, County Bldgs., gravel resurfacing, dust laying treatment, dragging and grading, pavement repairs, renewing surfaces, ditching, culvert repairs, own forces. **$181,000.** W. H. Keith, County Bldgs., engr.

Ont., Toronto — City, R. H. Saunders, mayor, City Hall, asphaltic concrete paving Cherry St., to Godson Contg. Co., Ltd., 203 Richmond St. West, **$30,866;** Booth St., to Kilmer, Van Nostrand & Co., Ltd., 315 Eglinton Ave. W., **$31,010.** R. C. Harris, c/o owner, engrs.

Ont., Toronto—Municipality, asphaltic concrete paving St. Albans St., to Geo. W. Porter Constr. Co., Ltd., Harbour Com. Bldg., **$30,493;** W. Mowatt Ave., to Godson Contg. Co., Ltd., 203 W. Richmond St., **$27,585.** R. C. Harris, City Hall, comr. Works and engr.

Que., Baie Comeau—Municipality, paving Laurier Avenue, concrete sidewalks, day labor, **$40,000.** A. Babin, Town Hall, engr.

Que., Montreal—Municipality, c/o J. A. Mongeau, city clk., City Hall, paving portions of 5 streets, to A. Duranceau, Oxford Ave., Montreal, **$81,351.** CD 3/26—ENR 3/29.

Sask., Saskatoon—Municipality, paving, surface treatment several streets, **$32,544,** paving, curbs, boulevards, **$29,000,** day labor. G. D. Archibald, City Hall, engr.

EARTHWORK, WATERWAYS

PROPOSED WORK

★**Alta., Coronation**—Dpt. Mines & Resources, Ottawa, Ont., diversion project, Red Deer River, incl. constructing dam, 130 ft. high, at Ardley or if construction at Content Bridge will be 175 ft. high, 100 mi. canal, 24 ft. wide, 12 ft. deep, etc. $6,750,000. CD 3/21—ENR 4/5.

Alta., Edmonton—Provincial Govt., Edmonton, reservoir at East Pot Hole Coulee, $350,000.

★**Alta., Magrath**—Dominion Govt., Ottawa, Ont., earthen dam on St. Mary River, $3,500,000. Prairie Farm Rehabilitation Admin., McCallum Hill Bldg., Regina, Sask., engrs.

Manitoba—Province of Manitoba, Winnipeg, plans completed Seine River Project, incl. large drain running west from St. Anne to Red River, $420,000. Ministry of P. Wks. & Hys., Winnipeg, engr.

BIDS ASKED

Bids Asked April 30

Ont., Sebringville—J. J. Braun, clk., Ellice Twp., Sebringville, repair, imprv., exten. East Black Creek Drain, $29,000. W. G. McGeorge, Chatham, engr.

Bids Asked May 3

†Idaho—Bureau Reclamation, Customhouse, Denver 2, Colo., concrete pipe and elbow units, etc., del. shipping point and/or Coeur de'Alene, Rathdrum Prairie 14x1620-.001 (Reimb.). Inv. 60,731-A.

Bids Asked May 15

†Mont., Hamilton—Bureau Reclamation, Hamilton, earthwork, structures, 43 acres clearing, 118,000 cu. yd. excav., 1,200 cu. yd. concrete, Sta. 0 plus 00 to Sta. 515 plus 30, Big Flat Unit, Missoula Valley Project. Spec. 1096.

†Mont., Missoula—Bureau Reclamation, Hamilton, earthwork and structures Station 0 plus 00 to Station 515 plus 30, Big Flat Canal and laterals, Big Flat Unit, Missoula Valley Proj., near here, Spec. 1096.

Bids Asked May 23

†Oregon—Bureau Reclamation, Bend, earthwork and structures, Lateral M-41 and sublaterals, and Lateral M-42, Deschutes Proj., about 32 to 37 mi. north of Bend, Spec. 1097.

Bids Asked May 26

†Nebraska—Bureau Reclamation, Hemingford, earthwork and structures, Sturgeon and Fairfield laterals and sublaterals, Mirage Flats Project, 18 to 30 mi. northeast of Hemingford, Spec. 1098.

Bids Asked May 29

†Colorado—Bureau Reclamation, Customhouse, Denver, 3 vertical-shaft, centrifugal pumps, each having capacity of not less than 200 cu. ft. per second at pump, head of 187 ft. and speed of 37 r.p.m., f.o.b. cars at shipping point or f.o.b. cars Granby, for installation at Granby Pump. Plant, Colorado-Big Thompson Proj., Spec. 1095.

Bids Asked June 12

Calif., Los Angeles—Los Angeles Co., Hall of Records, East Compton Creek 1 Drainage sys. near Walnut Park. Over $75,000. Bids 4/3 rejected. A. Jones, Hall of Records co engr. CD 4/9—ENR 4/12, under LB.

LOW BIDDERS

†Arkansas—U. S. Eng., 300 Bway., Little Rock, levee work near Van Buren, Crawford Co., from List & Clark, Constr. Co., Railway Exchange Bldg., Kansas City, Mo., $55,563.

Calif., Sierra Madre—Los Angeles Co. Flood Control Dist., 751 S. Figueroa St., Los Angeles, Zone 14, Bailey Canyon Debris Dam and Basin, from Bert Calvert, 4546 E. Washington St., Los Angeles, **$17,102.** H. E. Hedger, 751 S. Figueroa St., Los Angeles, engr. CD 1/15—ENR 11/23.

CONTRACTS AWARDED

†Idaho, Boise—U. S. Eng., Pittock Block, Portland, Ore., reconstructing levees and revetments on both banks Boise River, Neg. 1038, to Smith & Wildman Constr. Co., Baugh Bldg., Twin Falls, **$19,803.** Bids 3/31 rejected. CD 4/9—ENR 4/12 under LB.

†Tex., Marshall Ford Dam—Bureau Reclamation, Custom House, Denver, Colo., reconditioning twenty-four 102 in. steel gates, spillway repairs, road work, etc., at Marshall Ford Dam, force-account. **$90,000.** CD 4/10—ENR 4/12.

Minn., Blue Earth—Faribault Co., G. G. Buscho, aud., cleanout ditch, to Ulland Bros., Austin, **$27,278.** Bids 4/2.

Que., Valleyfield—Montreal Cottons Ltd., 710 Victoria Sq., Montreal, retaining wall alongside flumes, to Anglin-Norcross Quebec Ltd., 892 W. Sherbrooke St., Montreal, **$25,130.**

LATIN AMERICA

Brazil, Fortaleza—Cia. Comercial e Industrial Norte-Brazileira, Avenida Francisco Sa, Fortaleza, plans tin can mfg. plant, $100,000.

Bermuda, Hamilton — Bermuda Railway Co., Hamilton, plans addnl. railway construction. $300,000.

British Guiana, Georgetown — British Guiana Govt., Georgetown, plans headquarters bldg. for head teachers of primary schools. About $150,000.

Chile, Antofagasta—Government of Chile, Santiago, plans 150 dwellings. $200,000. Popular Housing Institute, Santiago, engr.

Chile, Concepcion—Government of Chile, Santiago, plans 250 dwellings. $150,000. Popular Housing Institute, Santiago, engr.

Chile, Iquique—Government of Chile, Santiago, plans 150 dwellings. $200,000. Popular Housing Institute, Santiago, engr.

Chile, Magallanes—Government of Chile, Santiago, plans 200 dwellings. $175,000. Popular Housing Institute, Santiago, engr.

Chile, Santiago—Retirement & Social Provision Institute of the State Railroads, Santiago, plans housing program for railroad workers only. 24,000,000 pesos appropriated.

Chile, Talca—Government of Chile, Santiago, plans 275 dwellings. $250,000. Popular Housing Institute, Santiago, engr.

Chile, Valparaiso—Government of Chile, Santiago, plans 500 dwellings. $255,000. Popular Housing Institute, Santiago, engr.

Chile, Vinar del Mar—Government of Chile, Santiago, plans 300 dwellings. $260,000. Popular Housing Institute, Santiago, engr.

Ecuador, Loja—Government of Ecuador, Quito, plans electric and power plant extension, 1,000,000 Sucres. Dpt. P. Wks., Quito, engr.

Grand Terre Island, Grippon—Provisional Government of French Possessions, Guadeloupe, plans airfield, incl. two 2,000 meter rein.-con. runways, 2 hangars, administration bldg., custom house, restaurant, etc. French West Indies. $950,000.

Mexico—Dpt. P. Wks. & Communications, Tacuba St., Mexico City, plans Southeast

LATIN AMERICA (Cont'd.)

Railway in southeastern part of country to connect with Yucatan Peninsula. $5,000,000.

Mexico—State of Tamaulipas, c/o H. Pedro Gonzales, gov., Tampico, plans 90 mi. highway between Tampico and El Mante, $200,000; State of Tamaulipas, c/o H. Pedro Gonzales, Governor, Cuidad Victoria, constructing highway between Matamoras and Ciudad Victoria, $440,000. Engineer, c/o State Engineering Branch, Ciudad Victoria.

Mexico, Vera Cruz—State of Vera Cruz, Governor Adolfo Ruiz Cortines, Jalapa, takes bids in June, 50,000 person capacity sports arena. $250,000. CD 3/27—ENR 3/29.

Mexico, Emplame Escobedo—City of Emplame Escobedo (Lic. Ramon Rico), Municipal Bldg., takes bids within 90 days, constructing school with playgrounds. $165,000.

Mexico, Hualahuises—City, Hilario Contreras Molina, Hualahuises, takes bids within 3 months, school, incl. playground, $150,000.

Mexico, Mexico City—Celta-Mex, SA. Independencia, $70-794, Mexico, D. F., plans metallic covers factory. $100,000.

Mexico, Mexico City—Confederacion de Camaras Industriales, Ejido, 7-406, Mexico, D. F., plans Palace of Industry. $1,150,000.

Mexico, Mexico City—Insecticidas Agricolas, S. A. Nardo, 219 Mexico, D. F., plans agricultural insecticides factory. $100,000.

Mexico, Mexico City—Jose A. Mier y Teran., Ave. Francisco I. Madero 47, Mexico, D. F., takes bids in June office, Jorge Henriquez Guzman St.

Mexico, Monterrey—Productos Ceramicos, S. A., Zaragoza, 805, Monterrey, N. L., plans porcelainized art objects factory. $100,000.

Mexico, Villa de Santiago—Mexican Govt., Federal Electricity Comn., Ing. Carlos Ramirez, Ulloa, chn., Mexico, D. F., plans 600 hp. electricity generating plant. $85,000.

Nicaragua, Managua—Nicaraguan Government, Managua, plans national stadium, 144,000 Cordobas; imprv. Managua Cathedral, 2,000 Cordobas, military academy 192,000 Cordobas; communications and custom's bldg., 360,000 Cordobas; Presidential bldg. addn., 300,000 Cordobas. Dpt. P. Wks., Managua, engr.

Panama, Colon—Loteria Nacional de Beneficencia, Colon, plans 5 story office bldg. $175,000.

Panama, Panama City—Panamanian Govt., Panama City, plans 9 story, tuberculosis hospital to accommodate 420 patients. $1,750,000. Dpt. Works, Panama City, engr.

Peru, Chimbote—Republic of Peru, Lima, plans 125,000 kw. hydro-electric plant in Canon del Pato on Santa River, $5,875,000.

Peru, Trujillo—Government of Peru, Lima, plans 550 bed tubercular hospital, $2,000,000. Ministry of Public Health, Lima, engr.

PUBLIC BUILDINGS

PROPOSED WORK

†**Ariz., Winslow** — Pub. Housing Auth., NHA, 760 Market St., San Francisco, Calif., 50 family dwelling units, Ariz. 2381.

Ark., Camden—Harmony Grove Ind. School Dist., Route 3, plans by M. Selligmon, Pine Bluff, school. $150,000. Piling for FWA funds.

★†**Calif., Camp Cooke (br. Lompoc)**—U. S. Engr., 751 S. Figueroa St., Los Angeles, Zone 14, constructing maximum security disciplinary barracks for 1,500 prisoners, temporary housing for guard detachment, industrial bldg., etc. $4,620,000.

†**Calif., Dunsmuir**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, 40 family dwelling units, Calif. 4077.

†**Calif., Fresno**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, 90 family dwelling units, Calif. 4078.

†**Calif., Indio**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, 35 family dwelling units, Calif. 4078.

★†**Colo., Anvil Points**—Bureau Mines, Denver, constructing oil-shale demonstration plant, $1,500,000.

★**Colo., Greeley**—Weld Co. plans by Fisher & Fisher, Denver Natl. Bldg., Denver, and S. G. Frazier, assoc. archt., Greeley, altering and constructing plant addn. or constructing complete new plant. $420,000 available, total cost $1,000,000.

†**Conn., East Hartford**—East Hartford Housing Auth., 70 Cannon Rd., school, Laurel Park Heights project and area south Hockanum River, Mayberry Village War Housing for NHA. $150,000.

Ind., Gary—Bd. School Trustees, 524 Garfield St., plans by J. H. Wildermuth, 537 Sway., 2 story, bamnt., brick, stone, trim rein.-con. school addn. $320,000.

Kan., Pratt—City, G. Sitton, mayor, plans by G. H. Thomas, 125½ N. Topeka St., Wichita, municipal hospital, $350,000 bonds voted

†**Kan., Topeka**—U. S. Eng., 10 E. 17 St., Kansas City, Mo., surgical supply bldg. $15,000.

Kan., Winfield—City, P. Frankenfeld, mgr., plans by Overend & Boucher, Brown Bldg., hospital and nurses home addn., at Newton Memorial Hospital. $300,000 bonds voted.

La., Monroe—City, City Hall, P. A. Goag, city treas., City Hall, rejected bids Apr. 11, Contr. 11, power piping at Monroe Light Plant. Burns & McDonnell Engrg. Co., 107 W. Linwood Blvd., Kansas City, Mo., engr. CD 4/17—ENR 4/19.

†**La., New Orleans**—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth 1, Tex., cancelled construction 275 family dwelling units, La. 16112 and 16113. CD 4/3—ENR 4/5.

†**Mass., Taunton**—U. S. Eng., 31 St. James Ave., Boston, bldgs., addnl. facilities, 19-023-45-Neg-118. $18,000.

†**Nev., Carlin**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, Calif., 35 family dwelling units, Nev. 26178.

†**Nev., Reno**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, Calif., 75 family dwelling units, Nev. 26179.

†**N. M., Clovis**—Pub. Housing Auth., NHA, 1411 Electric Bldg., Seventh and Lamar Sts., Fort Worth, 2 Tex., plans by Schafer & Merrill, Clovis, 40 family dwelling units, NM 29-191.

†**N. M., Tucumcari**—Pub. Housing Auth., NHA, 1411 Electric Bldg., Seventh and Lamar Sts., Fort Worth, 2, Tex., plans by Schafer & Merrill, Clovis, New Mexico, 20 family stop-gap units, NM-29190.

†**N. Y., Mineola**—U. S. Eng., 120 Wall St., New York, Zone 5, soon takes bids, direction finder bldgs. and sys., $20,000.

†**N. Y., Youngstown**—U. S. Eng., 120 Wall St., New York, Zone 5, bids soon from revised plans warehouse.

O., East Palestine—City, City Hall, enlarging power plant, incl. turbine, stoker, condenser, etc. $208,000.

O., Shelby—Municipal Light Plant, Shelby, addn. housing 3rd boiler for light plant. $275,000.

★†**Okla., Oklahoma City**—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar St., Fort Worth 2, Tex., 400 addnl. housing units, in Carverdale Adn. $2,175,000.

†**Ore., LaGrande** — Pub. Housing Auth., NHA, Skinner Bldg., 5 Ave. and Union St., Seattle 1, Wash., plans by D. Edmundson & H. Brookman, Henry Bldg., Portland, 40 family dwelling units, Ore. 35315. CD 4/19.

†**Ore., Roseburg** — Pub. Housing Auth., Skinner Bldg., 5 Ave. and Union St., Seattle 1, Wash., plans 60 housing units. $180,000.

†**Ore., Sutherlin**—School Bd., Sutherlin, 2 room addn. to school bldg. $17,800. **FWA.**

†**Tex., Camp Normoyle**—U. S. Eng., Fort Sam Houston, 6 warehouses on 177-acre tract, over $150,000.

Tex., Imperial—Buena Vista Independent School Dist., c/o D. K. Caffy, supt., Imperial, plans by Haynes & Strange, 415 Myrick Bldg., Lubbock, rebuilding school, recently destroyed by fire. $210,000. Bonds voted.

★†**Utah, Camp Kearns**—U. S. Eng., 18 St. and Virginia Ave. N.W., Wash. 25, D. C., addnl. bldgs., air conditioning 9 wards and clinic bldgs., automatic sprinkler and alarm sys. $500,000.

★**B. C., New Westminster**—Royal Columbia Hospital, New Westminster, plans by E. Evans & Son, 119 W. Pender St., Vancouver, hospital wing, $750,000.

B. C., Prince Rupert—Bd. School Comn., Prince Rupert, high school, $150,000.

N. B., Alberton—Western Hospital Bd., Alberton, hospital, $150,000.

★**N. B., Fredericton**—Province of New Brunswick, c/o Dpt. P. Wks., Fredericton, government office bldg. About $500,000.

Newfoundland, Notre Dame Bay—Hospital Bd., c/o J. Manuel, Twillingate, hospital addn. $150,000.

N. S., Digby—Bd. Educ., Digby, vocational training school, $150,000.

N. S., Halifax—Bd. Educ., Halifax, vocational training high school, $200,000.

N. S., Halifax—Municipality, plans by C. A. Fowler, Capitol Bldg., boiler house and plant.

N. S., St. Margaret's Bay (Postal Dist. Halifax)—Dpt. Educ., Halifax. Junior-Senior High School. $150,000.

N. S., Shelburne—Bd. Educ., Shelburne, vocational training high school, $150,000.

N. S., Sydney—Bd. Educ., Sydney, vocational training high school, $250,000.

N. S., Yarmouth—Bd. Educ., Yarmouth, vocational training high school, $150,000.

Ont., Iroquois Falls—Separate School Bd., Iroquois Falls, school in Ste. Anne's Parish. $150,000.

Ont., Kingston—Governors of Queen's University, Kingston, biological station, Opinicon area. $75,000. Site purchased.

Ont., London—City of London and Middlesex Co., London, isolation ward at Victoria Hospital, 391 Ottaway St. Over $150,000.

Ont., Malton—Dominion Govt., Ottawa, plans by Dp. Veterans Affairs, Daly Bldg., Ottawa, remodeling bldg. units of Air Observers School as 500 bed hospital. $150,000.

Ont., Port Arthur—Bd. Educ., Port Arthur, plans by G. Blanchard, 304 Public Utilities Bldg., school.

Ont., St. Catherines—St. Catherines Bd. Educ., F. E. Hetherington, 7 Queen St., plans by T. R. Wiley, 134 St. Paul St., 1 story, exten. to St. Catherines Collegiate Institute and Vocational School, Catherine St. $150,000.

Ont., Sault Ste Marie—Municipality, exten. Plummer Memorial Hospital. $150,000.

Ont., Toronto—Toronto East General Hospital, Coxwell Ave., hospital addn. $275,000.

★**Ont., Windsor**—Metropolitan Hospital Bd., Windsor, 200 bed hospital addn., nurses' home, training school, $700,000.

Que., Grand 'Mere—Municipality, plans by E. Denoncourt, 1425 Notre Dame St., Three Rivers, hospital. $400,000. CD 3/13—ENR 3/15.

Que., Joliette—Province of Quebec, Quebec City, garage. $75,000. E. Gohier, Dpt. Roads, Quebec City, engr.

Que., Magog—Municipality, J. D. Hamel, mayor, plans by J. P. Audet, 52 Prospect St., Sherbrooke, 2 story, bamnt., 60x115 ft. and 20x50 ft. municipal bldg. $150,000.

Que., Magog—Municipality, plans by J. P. Audet, 52 Prospect St., Sherbrooke, market and parking place, $40,000.

Que., Montreal—Province of Quebec, Quebec City, plans by Dpt. Educ., Quebec City, Roman Catholic high school. $150,000.

Que., Quebec City—Municipality, c/o F. X. Chouinard, city clerk, garage and repair shop, $50,000. E. Hamel, City Hall, city mgr.

Sask., Beaver Bluff—Province of Saskatchewan, Regina, fish filleting plant, $40,000. Dpt. Natural Resources, Regina, engr.

Sask., Kindersley—Municipality, 60 bed hospital. $150,000. J. Knox, Jr., Town Hall, engr.

Sask., Prince Albert—Province of Saskatchewan, Regina, cold storage plant. $50,000. Dpt. Natural Resources, Regina, engr.

★**Sask., Saskatoon**—University of Saskatchewan, Saskatoon, plans by Webster & Gilbert, 212 C.P.R. Bldg., in association with F. H. Portnall, Regina, medical college, $650,000.

Sask., Silver Grove—Province of Saskatchewan, Regina, fish filleting plant in Pelican Narrows Area. $40,000. Dpt. Natural Resources, Regina, engr.

Sask., Swift Current—School Comrs., Swift Current, collegiate school. $150,000.

BIDS ASKED

Bids Asked May 1

★†**D. C., Anacostia**—Pub. Housing Auth., NHA, Longfellow Bldg., 1201 Connecticut Ave. N.W., Wash., Zone 25, 300 permanent family units, Stanton Rd. and Alabama Ave., D.C. 1-6. $1,500,000. Plans deposit $25. Howe & Kahn, Bulletin Bldg., Phila., Pa., archts. CD 4/11.

Bids Asked May 2

†**Ga., Waycross**—Comrs. Roads & Revenue, Ware Co., W. E. Lee, clk., Court House, Ware Co. Health Center, with equip., Ga. 9-346-N. Plans deposit $25. C. W. Bergen, 1013 Liberty Bank Bldg., Savannah, archt. CD 1/2—ENR 1/4.

N. Y., Cortland—Dpt. P. Wks., State Office Bldg., maintenance storage No. 4 for Education Dpt., Education Bldg., Albany. Plans deposit $5. CD 1/5—ENR 1/11.

Bids Asked May 3

†**N. C., Raleigh**—Bureau of Mines, Interior Bldg., E St. between 18 and 19 Sts. N.W., Wash. 25, D. C., laboratory bldg., on State College property in West Raleigh. Henry Powell Hopkins, 10 E. Mulberry St., Baltimore, Md., archt. CD 3/7—ENR 3/15.

Bids Asked May 4

Ill., Rochelle—City, City Hall, 1 story, bamnt., 151x231 ft., brick, stone, concrete, steel hospital. Schmidt, Garden & Erikson, 104 S. Michigan St., Chicago, archts.

PUBLIC BLDGS. (Bids Asked, Cont'd.)

Bids Asked May 7

Wash., Seattle—School Dist. 412, Oak Lake School, N. 100 St. and Aurora Ave., Zone 33, 1 story addn. Lake City School, 2 story addn. Brodview School, 1 story administration bldg., 1 story garage, all brick. $165,000. W. A. Mallis, Lyon Bldg., 3 and James Sts., Zone 4, archt. CD 3/16—ENR 3/22.

Bids Asked May 8

†**Tex., Hooks**—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth, Zone 2, 100 family dwelling units, Tex. 41-699. $200,000. G. Dahl, Southland Life Bldg., Dallas, archts.

†**Tex., Texarkana**—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth, 100 family dwelling units, Tex. 41699. Plans deposit $50. G. Dahl, Southland Life Annex Bldg., Dallas, archt. CD 3/29—ENR 4/5.

†**Utah, St. John**—Pub. Housing Auth., NHA, 760 Market St., San Francisco Calif., 75 temporary family dwelling units, Utah 42203, Ashton & Evans & Lowell, E. Parrish, 312 Beneficial Life Bldg., Salt Lake City, Zone 1, archts. CD 3/21—ENR 3/22.

Bids Asked May 9

Ont., Ottawa—Secy. Dpt. P. Wks., Ottawa, 4th floor temporary office bldg., Wartime Prices and Trade Bd., Sussex St. $160,000. Plans deposit $25. C. D. Sutherland, c/o Dpt. P. Wks., Ottawa, archt.

Bids Asked May 16

N. Y., Kings Park—Comrs. Dpt. Mental Hygiene, State Office Bldg., Albany, Zone 1, heating work, service connections, and electric work, tunnel lighting, at Kings Park State Hospital. CD 4/20.

Bids Asked May 29

†**Me., Togus**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., addnl. bldgs., utilities incl. Shop Bldg. 221, connecting corridors, etc., Proj. 2152. CD 4/6—ENR 4/12.

Bids Asked May 31

Ind., Crawfordsville—Bd. P. Wks. & Safety, City Hall, equip. for light and power plant. Plans deposit $10. Commercial Testing & Engineering Co., 307 N. Michigan Ave., Chicago 1, Ill., engr., adv. ENR 4/26.

Bids Asked After June 12

★**Tex., Odessa**—Bd. Educ., c/o M. H. Fly, supt., Odessa, 2 story, brick, natural stone Senior High School. $500,000 bonds voted. Haynes & Strange, 415 Myrick Bldg., Lubbock, archts.

Bids Asked

★†**Tex., Baytown**—U. S. Eng., 25 St. and Avenue F, Galveston, addnl. facilities at Baytown Ordnance Mfg. plant, $500,000.

★†**Tex., Houston** — Lahreen Mfg. Plant Corp., Houston, brick, steel shell plant, $3,500,000. Defense Plant Corp. will finance. Gannett, Fleming, Corddry & Carpenter, Inc., 600 N. Second St., Harrisburg, Pa., engrs.

LOW BIDDERS

†**Calif., Hunters Point** — Pub. Housing Auth., NHA, 760 Market St., San Francisco, Apr. 17, 144 family dwelling units, Calif. 4030-N, from Midstate Constr. Co., 1299 Bush St., San Francisco, **$300,483.** D. P. Smith, H. Walford, Hyman & Appleton, 58 Sutter St., San Francisco, archts. CD 3/20—ENR 3/22.

†**Calif., Long Beach**—Pub. Housing Auth., NHA, 816 W. 5 St., Los Angeles, Apr. 14, 192 family dwelling units, Calif. 4992-N. from Thomas & Beyer, Chamber of Commerce Bldg., Los Angeles, **$401,725.** CD 3/26—ENR 3/29.

†**Calif., Port Chicago**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, Apr. 14, 216 temporary family dwelling units, Calif. 4020-N., near here, from MacDonald, Inc., Financial Center Bldg., San Francisco, **$449,944.** CD 4/3—ENR 4/5.

†**Calif., San Bruno**—Pub. Housing Auth., NHA, 760 Market St., San Francisco, Apr. 20, 152 temporary family dwelling units, Calif. 4033-N, from C. T. Lindsay, 564 Market St., San Francisco, **$344,587.** CD 4/10—ENR 4/12.

†**Calif., San Diego**—Pub. Housing Auth., NHA, 760 Market St., Los Angeles, Apr. 14, 96 family dwelling units, Calif. 4040-N, from W. D. Haxton, 515 Bway., Bldg., **$211,000.** CD 4/5.

★†**Calif., Vallejo** — Pub. Housing Auth., NHA, 760 Market St., San Francisco, Apr. 19, 92 temporary family dwelling units, Calif. 4999-N, from Moore & Roberts, 693 Mission St., San Francisco, **$657,350.** CD 4/3—ENR 4/5.

†**D. C., Wash.**—Bd. Educ., District Bldg., Apr. 17, superstructure Parkside School Bldg., D. C. 49-189, from J. D. Hedin Constr. Co., 320 Michigan Ave. N.E., **$364,000. FWA.** CD 4/9—ENR 4/12.

†**D. C., Wash.**—Federal Works Agency, 18 and F Sts. N.W., Zone 25, Apr. 20, nurses home at St. Elizabeth's Hospital, D. C. 49153, from Frelett Contg. Co., 318 15 St. S.E., **$208,613.** CD 4/11.

★†**Ga., Dublin**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., Apr. 16, 400 bed hospital expan., 6 ward bldgs. with connecting corridors, cold storage bldg. and animal house, Spec. 16008, NOY 11711-1604/1-17, from Beers Constr. Co., 70 Ellis St. N.E., Atlanta, **$1,494,745.** CD 4/2—ENR 4/5.

†**Md., Baltimore**—Bureau Constr., Pub. Imprvts. Comn., City Hall, Apr. 19, school, Md. 18215, from P. Vizzini, 504 Stamford Rd., **$338,645. FWA.** CD 4/9—ENR 4/12.

†**Mo., St. Louis**—Reconstruction Finance Corp., 407 N. 8 St., St. Louis, Zone 1, Apr. 16, 1 story, 300x1,200 ft. and 1 story, 300x300 ft. warehouses at 8900 S. Bway., Zone 15, from Gamble Constr. Co., 620 Chestnut St., Zone 1, **$390,500;** grading, paving, etc., from H. B. Deal & Co., Inc., 1218 Olive St., Zone 3, **$98,870.** K. Franzheim-A. B. Mills, 728 18 St. N.W., Wash., D. C., assoc. archts.

CONTRACTS AWARDED

†**Calif., Benicia**—U. S. Eng., 74 New Montgomery St., San Francisco, reclamation bldg., Spec. 1908, to Stolte, Inc., 8451 San Leandro St., Oakland, **$143,514.**

★†**Calif., San Diego**—Pub. Housing Auth., NHA, 816 W. 5 St., Los Angeles, 400 family dwelling units, Calif. 4995-N, to A. Farnell Blair, 7052 Santa Monica Blvd., Los Angeles, **$897,890.** Awarded 4/12. CD 4/16—ENR 4/19 under LB.

†**Calif., San Francisco**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., facilities for maintenance equip., NOFT, NOY 9860 to C. F. Parker, 1644 Monterey Blvd., $75,340.

†**Calif., Terminal Island**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., homoja housing development, NOY 11140, to Contracting Engineers Co., 22012 Vernon Ave., Los Angeles, **$399,900.** CD 3/29.

†**Kan., Fort Riley**—U. S. Eng., 10 E. 17 St., Kansas City, Mo., reconstructing laundry bldg., incl. utilities, etc., Contr. No. W-23-028-eng-770, to A. M. Anderson Constr. Co., Geneva, Neb., **$70,571.** CD 2/9—ENR 2/15.

†**Minn., Fort Snelling (br. St. Paul)**—U. S. Eng., 1708 Jackson St., Omaha, Neb., warehouse bldgs., incl. utilities roads and area surfacing, Contr. No. W-25-066-eng-729, to Madsen Constr. Co., 1790 Lynndale Ave., Minneapolis, **$49,838.**

†**Neb., Grand Island**—U. S. Eng., 909 17 St., Denver, Colo., bldgs., at Cornhusker Ordnance Plant, incl. loading dock, inert storage bldg., 2 sampling rooms, dust collecting sys., railroad track, turnouts, storage bldg., to A. M. Anderson Constr. Co., Geneva, **$152,000.**

†**N. J., Fort Dix (br. Trenton)**—U. S. Eng., 120 Wall St., New York 5, N. Y., addnl. construction, alterations to Personnel Center, to A. A. LaFountain, Inc., 159 Beech St., Hackensack. **$262,685.** CD 3/29—ENR 4/6.

†**N. J., Pedricktown**—U. S. Eng., 120 Wall St., New York, 5, N. Y., cafeteria at Delaware Ordnance Depot, to William Linker Co., Inc., 2036 Arch St., Phila., Pa., **$34,500.** Awarded 4/12.

†**Ore., Troutdale**—Reconstruction Finance Corp., 811 Vermont Ave. N.W., Wash. 25, D. C., two 125x400 ft. surplus storage warehouses, to L. H. Hoffman, 715 S.W. Columbia, Portland, **$101,074.** Bids 4/11. K. Franzheim & A. B. Mills, 728 17 St., Wash., D. C., archts. CD 3/26—ENR 3/29.

★†**Pa., Phila.** — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., exten. administration bldg. and cafeteria, Naval Aviation Supply Depot, Spec. 14514, NOY 10074, to Ralph S. Herzog, Schaff Bldg., 1505 Race St., **$554,480.** CD 3/14, under CA.

★†**Wash., Seattle**—King County Housing Auth., 4 and Cherry Bldg., Zone 4, 256 unit war apartment and recreation bldg., near South Park, Wash. 45310, for NHA, to Nelse Mortensen & Co., 1021 Westlake Ave. N., Zone 9, **$596,627.** CD 2/27—ENR 3/1, under LB.

★†**Wis., Tomah**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., addnl. hospital bldgs., etc., to Gust K. Newburgh Constr. Co., 9 S. Clinton St., Chicago, Ill. **$4,467,900.** Bids 4/3. CD 4/5—ENR 4/12, under LB.

★**Ont., Toronto**—Dpt. P. Wks., Ottawa, superstructures, active treatment and outpatients bldgs. for Sunnyrook Military Hospital, to Redfern Const. Co., Ltd., Excelsior Life Bldg., about **$4,200,000.** Bids 4/4. CD 3/20—ENR 3/22.

Sask., Saskatoon—Wartime Housing, Ltd., 55 York St., Toronto, Ont., 100 dwellings to Piggott Constr. Co., Ltd., Saskatoon, Sask. **$340,000.** CD 12/29—ENR 1/11.

COMMERCIAL BUILDINGS

PROPOSED WORK

La., Franklin—Dr. G. G. Aycock, Franklin, soon lets contract two 1 story 33x88 ft. masonry brick, wing addns., alterations. Favrot & Reed (Fred J. Nehrbass) Associate, Nola Bldg., New Orleans, archts.

★**Pa., Pottstown**—Pottstown Home Builders Co., c/o W. B. Zern, Franklin Apartments, King and Franklin St., plans 196 residences. $800,000.

Pa., Shaler Twp.—G. Levin, 6363 Douglas Ave., Pittsburgh, plans by P. Friedmen, 5509 Avondale Pl., Pittsburgh, fifty 1½ story, bsmnt. residences. $400,000.

Tex., Houston—Commercial Realty Co., Lucille Place, Houston, 51 duplexes, $400,000.

Tex., Houston—Houston Osteopathic Hospital, c/o J. L. Keith, Jr., archt., 4512 Magnolia St., 135x135 ft., concrete, brick, hollow tile osteopathic hospital, $150,000.

Alta, Calgary—Merrill Muttart, c/o City Clerk, Calgary, 20 dwellings in Elbow Park Section, $150,000.

Alta., Calgary—Lutheran Welfare Society in Alberta, c/o Rev. T. M. Hansen, Sharon Church, Calgary, home for aged, $150,000.

Alta., Calgary—Committee, c/o W. Earle Robertson, pres. Bd. of Trade, Calgary, blood testing and research laboratory. Over $50,000.

★**B. C., Vancouver**—Owner, c/o C. B. K. Van Norman, archt., Stock Exchange Bldg., low cost housing, $2,000,000; apartment and stores, $500,000.

Man., Winnipeg — Young Men's Hebrew Assn., Winnipeg, recreation bldg., Harvrave St. Over $150,000.

Ont., Bancroft—Canadian Red Cross Society, 621 Jarvis St., Toronto, hospital $150,000. Architect, c/o Outpost Hospitals Dept., Ontario Div. Canadian Red Cross, Toronto.

Ont., Etobicoke — B. Cioci, 43 Hook Ave., bungalows. $150,000.

Ont., Fort Erie—Canadian Legion, Branch 71, Fort Erie, veterans bldg. $150,000.

★**Ont., Fort William**—**The T.** Eaton Co. Ltd., Yonge St., Toronto, department store. About $800,000.

Ont., Hamilton—St. Stephen's Parish, Catholic Diocese, Hamilton, plans by J. H. Haffa, 96 Bloor St. W., Toronto, 44x115 ft. church. About $175,000.

Ont., Huntsville—Canadian Red Cross Society, 621 Jarvis St., Toronto, hospital. $150,000. Architect, c/o Outpost Hospitals Dpt., Canadian Red Cross (Ontario Div.), Toronto.

Ont., London—London Health Assn., E. V. Buchanan, secy., London, plans by D. Hennigar, London Life Bldg., brick, concrete boiler house and new boilers installed at Queen Alexandra Sanatorium, $50,000.

Ont., London — Ont. Society of Crippled Children, 343 Richmond St., camp bldgs., wading pools, etc. Over $150,000. J. M. Watt, c/o owner, archt.

Ont., Nipigon—Canadian Red Cross Society, 621 Jarvis St., Toronto, hospital. $150,000. Architect, c/o Outpost Hospitals Dpt., Ontario Div. Canadian Red Cross, Toronto.

Ont., Ottawa—R. McClelland, 49 Frank St., 75 houses. $350,000-$400,000.

Ont., Ottawa—E. R. McNeill, 180 Queen St., 6 story, bsmnt., office and store bldg., Queen St. $175,000.

Ont., Ottawa—Morrison, Mobley & Morrison, 280 Main St., 60 houses. $270,000-$300,000.

Ont., Ottawa—Synagogue and Jewish Community Centre of Ottawa, c/o S. J. Ritt, 432 Daly Ave., plans synagogue, communal meeting rooms, assembly hall, gymnasium, school and gymnasium. $150,000.

Ont., Sudbury — Young Men's & Young Women's Christian Assn., L. H. Burgess, secy., remodelling bldg. and constructing wing. $168,000.

★**Ont., Toronto**—Canadian Furniture & House Furnishings, Inc., Fleet St., furniture mart and truck storage depot, foot of Bay St. $600,000.

★**Ont., Toronto**—Hospital for Sick Children, 67 College St., hospital, University Ave. $6,000,000.

COMMERCIAL BLDGS. (Proposed Work, Cont'd.)

Ont., Toronto—Mrs. McAdam, 3334 Dufferin St., dwellings, Churchill Park, $200,000.

Ont., Toronto—Owner, c/o R. Franklin Stibbard, 405 Whitmore Ave., dwellings, $150,000.

★**Ont., Toronto**—St. Mary's Hospital Bd., 550 Jarvis St., hospital, at North York, $500,000.

★**Ont., Toronto**—Salvation Army, 20 Albert St., hospital, Davisville Ave. $600,000.

Ont., Toronto—S. A. Smith, 790 Eglinton Ave. W., plans by Page & Steele, 20 St. Clair Ave. W., 4 story, bsmnt., 40 suite, brick apartment Bathhurst St. and Eglinton Ave. About $150,000.

★**Ont., Toronto**—20th Century Theatres, Ltd., 21 Dundas Square, theatres, Danford Ave. Rd., $300,000; Kingston Rd., $200,000.

Ont., Wiarton—Canadian Red Cross Society, 621 Jarvis St., Toronto, hospital. $150,000. Architect, c/o Outpost Hospitals Div., Ontario Div. Canadian Red Cross, Toronto.

Ont., Windsor—Housing Cooperative, c/o Chas. Chunn, secy. Wartime Housing Tenants Assn., Windsor, 100 dwellings. $300,000.

Ont., Windsor—Owner, c/o G. Buller-Colthurst, Equity Chambers, 29 homes, $348,000.

★**Ont., Windsor**—Owner, c/o G. Buller-Colthurst, archt., Equity Chambers, 200 industrial homes. $1,000,000.

P. E. I., Charlottetown—Prince County Hospital Assn., E. H. Strong, c/o owner, hospital. $325,000.

Que., Beauvoir—Roman Catholic Congregation of Beauvoir, Beauvoir, church, $150,000.

Que., Chicoutimi—Rev. Canon P. Morel, The Seminary, Chicoutimi, plans by P. Desbien, Chicoutimi, hall. $200,000.

Que., Chicoutimi—Seminaire de Chicoutimi, Rev. C. P. Morel, superior, chapel and hall, at Seminary Blvd. St. Michel. $200,000.

Que., Magog—Roman Catholic Parish of Ste. Marguerite, Magog, plans by J. A. Poulin, 63 Prospect St., Sherbrooke, church, $150,000.

Que., Montreal—Church of Christ The King, c/o Rev. J. Fortin, 9290 Berri St., church, Lageunene St. $200,000.

Que., Quebec City—Lairet Construction Cooperative, Inc., c/o E. Jobin, City Hall, 35 dwellings, $175,000.

Que., Quebec City—Ligue Anti-Tuberculosis de Quebec, 125 Magenard St., plans by P. Rousseau, 308 St. John St., altering Stuart property, St. Louis Rd., for health camp and clinic. $175,000.

Que., Ste. Agathe des Monts—Laurentain Sanatorium Assoc., 3664 St. Urbain St., Montreal, 150 bed hospital, $200,000.

Que., St. Hilaire—Corp. of Home for Epileptics, St. Hilaire, plans by Lawson & Little, 660 St. Catherine St. W., Montreal, 3 story, 35x200 ft. Dieppe Home for Epileptics, rein.-con. About $225,000. Brouillet & Carmel, 3440 Shuter St., Montreal, engrs. CD 4/19.

Que., Shawinigan Falls—Corp. es du Tres Saint Sacrement, Notre Dame St., plans by P. Cote, 219 St. John St., Quebec City, 55x120 ft. monastary, with 42x56 ft. wing, $160,000.

Que., Waterville—St. Joseph Orphanage, Rev. F. Dominique, superior, plans by J. A. Sherbrooke, several bldgs. for orphanage. $300,000. Lalonde & Valois, Canada Cement Poulin & A. A. Poulin, 63 Prospect St., Bldg., Montreal, engrs. CD 3/8—ENR 3/15.

Sask., Melfort—Lady Minto Hospital Bd., Melfort, plans by L. M. Perkins, c/o owner, wing and other hospital imprvs.

LOW BIDDERS

N. C. Lexington — Lexington Memorial Hospital, Inc., c/o Trustees, Lexington, Apr. 17, general contract hospital, from Robt. H. Pinnex, Gastonia, N. C., **$189,575.** C. C. Hartmann, 120 Jefferson Standard Bldg., Greensboro, archt.

CONTRACTS AWARDED

Wash., Seattle—Lagerquist Brothers, 12702 15 Ave. N.E., Zone 55, 30 frame houses in North Ballard Dist., day labor. **$195,000.** Stuart & Durham, 4 and Cherry Bldg., Seattle, Zone 4, archts.

Ont., Hamilton—W. Townsend, 62 Weir St., 35 brick residences. Owner builds. **$157,500.** CD 12/13—ENR 12/28.

INDUSTRIAL BUILDINGS

PROPOSED WORK

Ark., Atkins—CANNERY—Valley Packing Co., Fayetteville, cannery, $40,000.

Conn., Danielson—PLANT—Prefabricating Constr. Co., Dayville, Danielson, plans completed by T. J. Brodeur, 435 Mill St., Worcester, Mass., two 1 story, 80x100 ft., concrete plant addns. $40,000.

Conn., Devon — GENERATING UNIT — Connecticut Light & Power Co., 36 Pearl St., Hartford, install. new 45,000 kw steam power generating unit, construct 115,000 volt high tension transmission lines from Devon to Meriden.

Conn., East Hartford—WAREHOUSE, etc. —Long Hill Ice Co., 1330 Main St., plans by C. F. Gifford, 16 Elm St., 2 story, brick, warehouse and truck garage, Main St. $40,000.

Conn., Montville—STEAM POWER PLANT —Connecticut Light & Power Co., 36 Pearl St., Hartford, steam power plant, removal two 10,000 kw low pressure steam units and install. 31,250 kw high pressure steam unit, constructing 115,000 volts transmission line to Southington replacing 66,000 volts line.

Conn., New Britain—FACTORY—Conn. Stamping & Binding Co., 34 Meadow St., 1 story, 75x200 ft., brick, concrete factory, Newington Ave. $60,000. Excavating, to J. E. Davin, 13 Spring St., East Hartford.

Conn., North Haven—FACTORY—American Crucible Co., Shelton, brick, steel factory, Washington Ave. Over $40,000.

Conn., Portland—FACTORY—Claire Glow Mfg. Co., I. M. Wolfson, 62 Maplewood Ave., West Hartford, plans by Chas. F. Gifford, 16 Elm St., East Hartford, 1 story, bsmnt., 80x140 ft., brick, steel factory, Indian Hill Ave. $43,000.

Ill., Chicago — FACTORY — Fort Wayne Corrugated Paper Co., 4500 S. Kilin Ave., brick, rein.-con., factory addn. $150,000. A. Epstein, 2001 W. Pershing Rd., engr.

★**Ind., Columbus** — FACTORY — Cummins Engine Co., Columbus, 1 story, 80x470 ft. factory addn. $625,000, incl. machinery, equip. Austin Co., 16112 Euclid Ave., Cleveland, O., engr. CD 3/12—ENR 3/15.

Ind., Frankfort—PLANT—Swift & Co., U. S. Yards, Chicago, Ill., soon lets contract soybean processing plant, brick, concrete, steel. H. W. Ruskamp, c/o owner, archt. CD 2/21—ENR 3/1.

Mass., Palmer—FACTORY—Better Brushes, Inc., Church St., soon lets contract 1 story, bsmnt., 40x80 ft., brick factory addn., concrete fdn. C. F. Dingman, Palmer, archt.

Mich., Flint—FACTORY—General Motors Corp., General Motors Bldg., Detroit, soon lets contract 1 story, brick, steel, concrete Factory Bldg. 12. Approx. $200,000. Albert Kahn Associated Architects & Engineers, Inc., 345 New Center Bldg., Detroit, Zone 2, archts.

N. Y., Selkirk—CAR DEPARTMENT—New York Central Sys. S. E. Armstrong, ch. engr., 466 Lexington Ave., New York, Zone 17, soon lets contract car department bldg.

O., Columbus — PLANT — Allis-Chalmers Mfg. Co., 784 Chambers Rd., plant, covering about 50,000 sq. ft.

O., Toledo—PLANT—Schill Pattern Co., Hendon Ave., plans by Hahn & Hayes, 723 Adams St., 1 story, 60x160 ft., brick, concrete plant addn., 20x25 ft. boiler room, 20x30 ft. office, Clinton St. $40,000 or more.

Ore., Albany — POULTRY CANNERY — C. R. Ashton, Albany, rejected bids Apr. 11, poultry cannery at Ferry and Walter Sts. C. H. Jenkins, 527 E. 4 St., archt. CD 4/19, under LB.

Ore., Worden—GRAIN ELEVATOR, etc.—Tulana Farms, Malin, soon lets contract rein.-con. grain elevator and workhouse. $280,000. E. F. Carter, Metropolitan Bldg., Vancouver, B. C., engr. CD 4/11—ENR 4/19.

Pa., DuBois—SAW MILL—Briggs DuBois Forest Products Co. (C. Briggs and J. E. DuBois, partners), 2 story, 80x120 ft. saw mill, near here. $100,000.

Tex., Denison—RAILWAY SHOPS—Missouri-Kansas-Texas Lines, K. H. Hanger, ch. engr., Railway Exchange Bldg., St. Louis 1, Mo., rehabilitation railway shops, $175,000.

Tex., Edinburg—PLANT—H. Jackson, 612 N. 8 St., making plans 1 story, frame, sheet metal packing plant, W. Harriman St. between 5 and 6 Sts.

Tex., Freeport—PLANT—Capt. C. Muchowich, 519 Brazos Blvd., Freeport, quick freeze plant, $150,000.

★**Tex., Kilgore**—PLANT—Gulf Oil Corp., Kilgore, expan. existing gas plant, $2,000,000.

★**Tex., Yoakum**—PLANT—Sterling Oil & Refining Co., et al, Sterling Bldg., Houston, recycling plant, $2,500,000.

Wash., Longview — PLANT — Long-Bell Lumber Co., Longview, piling, poles, ties and timber treating plant. Over $40,000.

Wis., Green Bay—FACTORY—Larson Co., 314 N. Bway., 1 story, 78x98 ft., concrete block canning factory, concrete fdn.

Wis., Prairie du Chien—PLANT—Wisc. Co-op. Farm Plant Foods, 18 S. Thornton Ave., Madison, revised plans by Toiz, King & Day, Inc., 1509 Pioneer Bldg., St. Paul, Minn., 1 and 2 story, 180x400 ft. fertilizer plant, steel, concrete fdn. $200,000. CD 6/14—ENR 6/15.

Wis., Rice Lake—STORAGE—Rice Lake Brewing Co., Rice Lake, plans by J. J. and T. H. Plad, 133 Langdon St., Madison, 1 story, 60x100 ft., concrete block storage bldg., concrete fdn.

Labrador — MINING DEVELOPMENT — Labrador Mining & Exploration, Ltd., 215 W. St. James St., Montreal, Que., iron mines development. Over $100,000.

Alta., Lethbridge — WAREHOUSE — T. Eaton Co., Ltd., 190 Yonge St., Toronto, Ont., hollow tile warehouse, $45,000.

Alta., West Edmonton—BOILER HOUSE, etc.—Canada Packers, Ltd., Edmonton, boiler house and storage addn. $80,000.

B. C., Canoe—FACTORY—Shuswap Lumber Co., Ltd., 602 W. Hastings St., Vancouver, factory addn. $40,000.

B. C., Cranbrook—SAW MILL—Galloway Lumber Co., Ltd., Cranbrook, saw mill and allied plant construction. $50,000.

B. C., Mineral Lake (Postal Dist. Cranbrook)—MILL—Cranbrook Sash & Door Co., Ltd., Cranbrook, mill, $40,000.

B. C., Penticton—STORAGE—Pyramid Co-Operative Ass't., Penticton, plans by R. Lyon, Penticton, 3 story, 120x40 ft., frame, stucco cold storage bldg. $98,000. CD 3/1—ENR 3/15.

B. C., Vancouver—PLANT—Electric Panel Mfg. Co., Ltd., 1250 Richard St., Vancouver, switchboard, panels, etc., mfg. plant, on Chestnut St. $40,000.

★**B. C., Vancouver**—BUS TERMINAL—Motor Transportation Ltd., 570 Dunsmuir St., plans by McCarter & Nairne, 1931 Marine Bldg., 2¼ story, rein.-con. bus terminal. $1,000,000.

★**B. C., Vancouver**—PLANT—Owner, c/o C. B. K. Van Norman, archt., Stock Exchange Bldg., industrial plant, $500,000.

B. C., Vancouver—MINE RECONDITIONING—Santiago Mines Ltd., 712 Robson St., reconditioning mine, mill and plant, generally at Dolomi Mine on Prince of Wales Island, near here. $50,000.

Man., St. Boniface — PLANT — Canadian Western Box Co., Ltd., 35 Marion St., plant addn. $50,000.

Man., Winnipeg—FACTORY—Fort Garry Knitting Mills, Ltd., Adelaide St., factory addn. between Bannatyne and McDermott Aves. $50,000.

Man., Winnipeg — SERVICE BLDG. — Powell Equip. Co., Ltd., 1060 Arlington St., 112x370 ft. brick, stucco, steel tractor service bldg., incl. frame equip. storage section. $100,000.

Man., Winnipeg — PLANT — Quinton Dye Works, Ltd., 7 Jessie St., plans by E. Prain, 511 Confederation Bldg., Winnipeg, plant addn. $40,000.

N. B., Fredericton—PLANT—Capital Cooperative, Ltd., 7 King St., farm and dairy products processing plant addn. $40,000.

N. B., Somerville—FACTORY—Hatfield Industries, Ltd., Hartland, potato factory. $40,000.

N. S. Amherst—PLANT—Maritime Industries, Ltd., Amherst, salt mfg. plant. Over $50,000.

N. S., Digby—PLANT—Committee, c/o Rene Richard, Digby, cold storage plant. $40,000.

N. S., Halifax—PLANT—Ben's Ltd., 7 Pepperell St., plant addn. $40,000.

N. S., Nappan Station—SALT MINE DEVELOPMENT—Syndicate, c/o Hon. L. D. Currie, Ministry of Mines and Labour, Halifax, salt mine development, necessary bldgs. and equip. $100,000.

N. W. T., Yellowknife—DIAMOND DRILLING — Argonaut Yellowknife Gold Mines, Ltd., Yellowknife, diamond drilling. $75,000.

Ont., Cayuga—COLD STORAGE—Haldimand Farmers' Cooperative Assn., Cayuga, cold storage bldg. $45,000.

Ont., Chatham—PLANT—Canada & Dominion Sugar Co., Ltd., 91 Tecumseh Rd., remodeling plant. Over $200,000.

Ont., Chatham — PLANT — Tupperville Farmers Cooperative, Inc., c/o E. Roy Shaw, Chatham, cereals, fruits, vegetables, etc. processing plant. $40,000.

INDUSTRIAL BLDGS. (Proposed Work, Cont'd)

Ont., Clarksburg—PLANT—Beaver Valley Creamery, Inc., Clarksburg, milk products plant. $40,000.

Ont., Clergue (Dist. of Cochran)—PLANT—Porquis and District Co-Operative Assn., c/o W. Baillod, Clergue, processing plant. $40,000.

Ont., Dobie—SHAFT SINKING, etc.—Queenston Mines, Ltd., Suite 1101, 85 W. Richmond St., Toronto, shaft sinking and diamond drilling, $60,000.

Ont., Dryden — MACHINE SHOP — Kraft Motors & Supplies, Ltd., c/o L. A. Bruce, Dryden, general machine shop, repairs and garage. $40,000.

Ont., Finch — PLANT — Canada Packers, Ltd., Union Stock Yards, Toronto, processing plant.

Ont., Freelton — PLANT—J. Morrison, Merchant St., cold storage plant. About $45,000.

Ont., Galt—FACTORY—Newlands & Co., Ltd., 31 S. Ainslie St., 1 story, 100x200 ft., textile factory exten. $48,000.

Ont., Humber (Toronto postal district)—FACTORY—British Drug Houses Canada, Ltd., 201 Queen's Quay, Toronto, plans by G. M. West, 43 Victoria St., Toronto, 2 story, brick, structural steel factory on Queen Elizabeth Highway. $50,000. Site Purchased.

Ont., Kingston — PLANT — New System Cleaners & Dyers, Ltd., c/o W. H. Cleland, Kingston, cleaning and dyeing plant, etc. $40,000.

Ont., Kirkland Lake—DIAMOND DRILLING—Glenora Gold Mines, Ltd., Kirkland Lake, diamond drilling. $60,000.

Ont., Kirkland Lake—MILL, etc.—Renable Mines Ltd., c/o Macassa Mines Ltd., 85 W. Richmond St., Toronto, mill and flow sheet. $50,000.

Ont., Kitchener—PRINTING PLANT—Nelson Press, Ltd., 11 N. Queen St., Kitchener, printing plant. $50,000.

Ont., Lindsay—MILL—Brinton-Peterboro Carpet Co., Ltd., Lock St., Peterboro, reconstructing existing premises providing modern spinning mill, Cambridge and Wellington Sts. About $45,000.

Ont., Merrickville—PLANT—Merrickville Co-Operative Assn., Merrickville, cereal, fruit, vegetables, etc. processing plant. $40,000.

Ont., Niagara Falls—REFINERY—Owner, c/o R. Franklin Stibbard, archt., 405 Whitmore Ave., Toronto, oil refinery. $60,000.

Ont., Ottawa—MINING—Laurentian Feldspar Corp. Ltd., c/o J. A. Robertson, 36 Monkland Blvd., mining development. $75,000.

Ont., Peterboro—TERMINAL STATION—Owner, c/o R. Franklin Stibbard, archt., 405 Whitmore Ave., Toronto, terminal bus station, George St. $70,000.

Ont., Red Lake—DIAMOND DRILLING SURFACE WORK—Carricona Gold Mines, Ltd., Red Lake, surface work, diamond drilling, $90,000.

Ont., St. Catherines — PLANT — Niagara Filter Corp. Canada, Ltd., St. Catherines, plant. $40,000.

Ont., Sarnia—BOILER HOUSE—Electric Auto Lite Ltd., 7 N. Christina St., boiler house exten. $40,000.

Ont., Shelburne—PLANT—Dufferin Potato Growers Co-Operative Assn., Shelburne, farm products processing plant. $40,000.

Ont., Sudbury—COLD STORAGE PLANT—Arctic Frozen Foods, Ltd., c/o W. E. Evoy, Sudbury, cold storage plant. $40,000.

Ont., Sudbury—DIAMOND DRILLING—Merit Gold Mines, Ltd., Sudbury, diamond drilling. $60,000.

Ont., Toronto—SHOP SERVICE—Acme Bearings & Parts, Ltd., 49-51 Charles St. E., automobile and industrial wholesale distributing business and machine shop service, 223-237 Mutual St. About $50,000.

Ont., Toronto—PLANT—Anglo Petroleum, Ltd., 75 Summit Ave., plans by G. E. Steadman, 315 Castlefield Rd., 2 story, concrete, brick plant addn. $50,000. CD 3/26—ENR 3/29.

Ont., Toronto — FACTORY — Armstrong Food Co. Canada, Ltd. c/o J. A. Wear, 2114 E. Queen St., food products factory, $40,000.

Ont., Toronto — DIAMOND DRILLING — Blairdon Gold Mines, Ltd., 371 Bay St., diamond drilling, in Tiblemont Twp. $60,000.

Ont., Toronto—PLANT—Boake Mfg. Co., Ltd., 1 Dartnell Ave., woodworking plant on Keele St. $45,000.

Ont., Toronto—PLANT—Canadian Lens Mfg. Co. Ltd., c/o H. M. Sherman, K. C., 1667 Bathurst St., optical instruments, etc. mfg. plant. $40,000.

Ont., Toronto—FACTORY—Chateau Fabrics, Ltd., c/o H. L. Mendelson, K. C., 465 Bay St., textile factory. $40,000.

Ont., Toronto—PLANT—Copp Clark Co., Ltd., 517 Wellington St. W., plans by Allward & Guionlock, 57 Bloor St. W., 5 story, bsmnt., steel, brick plant addn., Portland St. $60,000.

Ont., Toronto—MACHINE SHOP, etc.—Convoy Enterprises, Ltd., c/o C. G. French, 62 W. Richmond St., Toronto, machine shop, etc. $40,000.

Ont., Toronto—PLANT—Dominion Magnesium, Ltd., 302 Bay St., plant expan., remodeling. $100,000.

Ont., Toronto—PLANT—Electric Chain Co. of Canada, Ltd., 171 John St., 2 story, brick plant addn., concrete fdn. $40,000.

Ont., Toronto—PLANT—Igloo Refrigeration Engineering Ltd., c/o J. H. Maitland, 86 W. Bloor St., plant mfg. forging, repairing electrical, metallic and refrigeration equipment. $40,000.

Ont., Toronto—PLANT—Lowe Brothers Co., Ltd., 263 Sorauren Ave., plans by Prack & Prack, Pigott Bldg., Hamilton, brick, steel plant addn., 362 Sorauren Ave. $85,000.

Ont., Toronto—PLANT—National Batteries Co. Ltd., c/o N. T. Berry, 38 W. King St., storage and other batteries, etc., mfg. plant. $50,000.

Ont., Toronto—PLANT—Production & Tool Co., Ltd., 864 Pape Ave., plans by Hanks & Irwin, 35 Old Mill Rd., plant exten. $40,000.

Ont., Toronto—PLANT—Swift Canadian Co., Ltd., 1960 W. St. Clair Ave., packing plant on Keele St., $150,000.

Ont., Toronto—PLANT—Vulcan Chemical Products Ltd., c/o L. B. Campbell, K. C., 330 E. St. Clair St., chemical, cement, etc. mfg. plant. $50,000.

Ont., Toronto—FACTORY—West Toronto Creamery Products, Ltd., c/o H. H. Siegal, 85 W. Richmond St., creamery products factory, $50,000.

Ont., Wallaceburg — FACTORY—National Hardware Specialties, Ltd., Wallaceburg, factory. $40,000.

Ont., Windsor—TERMINAL STATION—Canadian National Rys., H. A. Dixon, ch. engr., 360 McGill St., Montreal, Que., terminal station.

Ont., Windsor—MINING DEVELOPMENT—Finlay Mining Co., Ltd., c/o G. Yates, K.C., Windsor, mining development. $50,000.

Ont., Windsor—BAKERY—John Gilchrist Bakery, Ltd., Windsor, bakery, $40,000.

Ont., Windsor—FACTORY—Owner, c/o D. J. Cameron, archt., Bartlet Bldg., factory. $50,000.

Ont., Windsor—PLANT—Perfect Cutting Tools Ltd., c/o W. G. Thomson, Windsor, plant. $40,000.

★**Que., Abitibi**—PLANT—Louvicourt Goldfield Corp., A. Archambault, secy., 1604 Alvred Bldg., Montreal, plant, underground development and initial mining unit, $550,000.

Que., Beauport—PLANT—Arthur Ferland, Ltd., Beauport, bread mfg. plant. $40,000.

Que., Bedford—PLANT—Torrington Co., Ltd., 110 River St., Bedford, plant addn., $75,000.

Que., Belleterre—DIAMOND DRILLING—Sand Lake Gold Mines Ltd., Belleterre, diamond drilling. $60,000.

Que., Bourlaque—DIAMOND DRILLING—Columbiere Gold Mines, Ltd., Bourlaque, diamond drilling. $65,000.

Que., Granby—FACTORY—General Textiles, Ltd., Granby, factory.

Que., Joliette—GARAGE, etc.—Garage P-E Savignac, Ltd., Joliette, garage and repair shop. $50,000.

Que., Lasarre—PLANING MILL—L. Boisvert, Lasarre, planing mill, etc. $40,000.

Que., Montmagny—PLANT—La Manufacture de Cerceucls et de Specialties, L.ee., Montmagny, coffin and general woodworking plant. $40,000.

Que., Montreal—PLANT—American Machine & Metals Canada, Ltd., c/o J. H. H. Robertson, K.C., 275 W. St. James St., plant. $40,000.

Que., Montreal—FACTORY—Johnson Food Products, Ltd., c/o A. M. McLeod Murray, 231 Portland St., factory. $50,000.

Que., Montreal — FACTORY — Montreal Clothing Co., Inc., G. I. Harris, 4216 St. Lawrence St., clothing and wearing apparel mfg. factory. $40,000.

★**Que., Montreal**—POWER PLANT—Shawinigan Water & Power Co., Ltd., 107 W. Craig St., power plant extens., rural line extens., and sub-station enlargements. $2,800,000.

Que., Montreal—FACTORY—Standard Sack Supply Co., 7 Colonial Ave., Montreal, plans by E. Gossack, c/o owner, factory reconstruction.

Que., Quebec City—PLANT—Hyster Corp., 2902 N.E. Clackamas St., Portland, Ore., hoist machinery plant, $300,000.

Que., Quebec City—WAREHOUSE—Kist Liqueurs de Quebec, Reg., 47 5 St., plans by P. E. Mathieu, 39 Moncton Ave., 2 story, 60x100 ft. warehouse. $40,000. CD 2/27—ENR 3/1.

★**Que., Quebec City** — PLANT — Quebec Power Co., Ltd., c/o Shawinigan Water & Power Co., Ltd., 107 W. Craig St., Montreal, power plant extens., rural line extens. and sub-station enlargements. $1,630,000.

Que., Rouyn—MINING DEVELOPMENT—Heva-Cadillac Mines, Ltd., Rouyn, exten. underground program, $200,000.

Que., St. Clet—PLANT—La Cooperative Federal de Soulanges, St. Clet, processing plant, etc., $40,000.

Que., St. Hyacinthe—FACTORY—Meunerie Cooperative de St. Thomas, St. Hyacinthe, processing factory. $40,000.

Que., St. Pie—PLANT—Societe Cooperative Agricole de Products, Laitiers de St. Pie, St. Pie, dairy products plants. $40,000.

Que., Ste. Emmelie—FACTORY—Urbain Lambert, Ste. Emmelie, factory. $40,000.

★**Que., Shawinigan Falls**—PLANT—Shawinigan Chemicals, Ltd., c/o Shawinigan Water & Power Co., Ltd., 107 W. Craig St. Montreal, exten., imprv. plants, incl. pilot plants for new products and general imprvs. in carbide plants and certain chemical processes. $2,800,000.

Que., Thetford Mines—DUST SHED—Asbestos Corp. Ltd., Thetford Mines, dust shed addn., equip. $65,000.

Que., Val d'Or—DIAMOND DRILLING—Vicour Gold Mines, Ltd., Fort Erie, extensive diamond drilling program in Louricourt Twp., $100,000.

Que., Valleyfield—PLANT—Montreal Cotton Co., Valleyfield, plant addns. $60,000.

Que., Valleyfield—PLANT—Quebec Distillers, Inc., c/o Hon. H. Authier, Valleyfield, plant exten. $40,000.

Que., Valleyfield—PLANT—Schenley Distillers, Inc., c/o J. Keifer, Valleyfield, plant exten. $50,000.

Que., Ville St. Pierre (Postal Dist. Montreal)—FOUNDRY—Dominion Brass & Aluminum Foundry, Ltd., 5244 Casgrain St., Montreal, foundry, etc. $40,000.

Sask., Saskatoon—PLANT—Ward Johnston Electric Co., Ltd., Saskatoon, plans by Webster & Gilbert, 2126 P. R. Bldg., plant addn.

Sask., Vance—COALING PLANT—Canadian Pacific Ry. Co., J. E. Armstrong, ch. engr., Windsor Station, Montreal 3, Que., 60 ton coaling plant, $55,000.

BIDS ASKED

Tex., Clyde—PUMPING UNITS—Magnolia Pipe Line Co., c/o Magnolia Bldg., Dallas, electric powered pump. unit (on Midland-Corsicana oil pipe line), over $40,000; No. 2, elctric powered pump. unit (on Midland-Corsicana line), over $40,000. CD 4/11—ENR 4/19.

Tex., McAllen—PLANT—Rado Refining Co., McAllen, ethyl gasoline plant unit. $50,000. CD 4/4—ENR 4/12.

Tex., Port Isabel—PLANT—Technical Fisheries Co., 1332 Evans Ave., San Francisco, Calif., and J. L. Kline, Port Isabel, 1 story, brick, rein.-con. plant. $40,000. CD 2/27—ENR 3/1.

CONTRACTS AWARDED

Mass., Northampton—PLANT—LaSalle Ice Cream Co., 238 Bridge St., concrete, brick mfg. plant addn., to D. A. Sullivan & Sons, Inc., 82 North St., approx. $40,000. F. S. Stuart, 78 Main St., archt.

Missouri, Illinois and Indiana—COMPRESSOR UNITS—Panhandle Eastern Pipe Line Co., 1223 Baltimore Bldg., Kansas City, Mo., four 800 hp. compressors in gas pump. station at Centralia, Mo. and Pleasant Hill, Ill.; two 1,000 hp. compressors in stations at Glenarm, Ill. and Montezuma, Ind., also auxiliary equip., to Midwestern Engineers, Drew Bldg., Tulsa, Okla. Est. $300,000. CD 4/11—ENR 4/19, under Ill., Glenarm and Pleasant Hill, and Mo., Centralia.

N. H., Londonderry—COLD STORAGE PLANT—W. P. Mack, Mammoth Rd., Belmont, Mass., 75x105 ft., brick cold storage plant. Owner builds, $40,000. E. V. Aldrich, 46 Lincoln St., Hudson, Mass., archt. CD 4/2—ENR 4/5.

★**N. Y., Schenectady** — TEST — General Electric Realty Co., 1 River Rd., test bldg., separate contracts, $1,857,500. Total $6,500,000 incl. equip. United Engineers & Constructors, Inc., 1401 Arch St., Phila., Pa., engr. and archt.

INDUSTRIAL BLDGS. (Contracts Awarded, Cont'd.)

O., Toledo—REPAIR SHOP—The Pennsylvania R.R., J. L. Gressitt, ch. engr., Broad St. Station Bldg., 1617 Pennsylvania Blvd., Phila. 4, Pa., general contract 1 story 100x252 ft., rein.-con. repair shop, to Cunningham-Rudy Co., 3087 W. Grand Blvd., Detroit, Mich. Est. **$100,000.** Awarded 4/17.

Ore., Freewater — WAREHOUSE—American Can Co., 230 Park Ave., New York, N. Y., 150x200 ft. tile and concrete warehouse to Sound Constr. & Engr. Co., 1403 W 45 St., Seattle 7, Wash., Est. **$70,000.** CD 3/21—ENR 3/29.

★**Pa., Cressona**—PLANT—Day & Zimmerman, Inc., Packard Bldg., Phila., altering mfg. plant, installing equip. Own forces. **$150,000.** $1,500,000 with equipment.

Pa., Phila.—PLANT—Hyman Brodsky & Son Co., 3 St. and Lehigh Ave., mfg. plant. Separate contracts. **$75,000-$100,000.** CD 1/24—ENR 1/25.

Tex., Bay City—PLANT—Bay City Rice Drying Co., Bay City, 30,000 bbl. rice drying plant, to Roy Berlinger of Berlinger Constr. Co., Bay City, approx. **$125,000.** Bids 3/15 rejected. CD 3/26—ENR 3/29, under LB.

Vt., Wallingford—MILL—American Fork & Hoe Co., Wallingford, 1 story, 110x115 ft., brick, steel, cinder block saw mill, to C. G. Noyes, 21 Center St., Rutland. Est. **$45,000.** C. B. Rowley, Keith Bldg., Cleveland, O., archt.

Va., Richmond—DAIRY, etc.—Lakeview Dairy, Inc., 1619 Brook Rd., modern dairy distr. plant and garage in Scott's Addn., to Graham Brothers, Mutual Bldg., 9 and Main Sts., approx. **$135,000.**

Wis., Fond du Lac—FACTORY—F. J. Stepnoski & Son, archts., 104 S. Main St., 1 story, 120 x 200 ft., etc., dairy equip. factory, rein.-con., to Immel Co., 101 S. Main St., for Damrow Bros., Western Ave. CD 2/20—ENR 3/1.

Wis., Menasha — FACTORY — Menasha Woodenware Co., 430 River St., 1 story., 32 x 367 ft., 120 x 132 ft., 52 x 75 ft., brick, tile, structural and rein.-con. factory addns., concrete fdns., to Fluor Bros. Const. Co., 48 Otter St., Oshkosh.

Wis., Oconto—FACTORY—Arbutus Beverage Co., Oconto, 1 story, 40 x 100 ft., concrete block factory addn., day labor. D. M. Schoepke, 1529 Elizabeth Ave., Marinette, archt.

B. C., Vancouver—PLANT—Western Plywood Co., Ltd., 675 W. Hastings St., plant, to Commonwealth Constr. Co., Ltd., 670 Taylor St., **$92,000.** Est. $295,400 equipped. CD 2/8—ENR 2/15.

★**Man., Transcona** — MALTING PLANT—Dominion Malting Co. Ltd., 412 Grain Exchange Bldg., Winnipeg, malting plant, to Commonwealth Const. Co. Ltd., 301 Royal Bank Bldg., Winnipeg. About **$1,000,000.**

Ont., Aylmer—COALING PLANT—Canadian National Ry., H. A. Dixon, ch. engr., 360 McGill St., Montreal, Que., coaling plant, to Johnson Bros., Co., Ltd., 36 Market St., Brantford, about **$45,000.**

Ont., Bowmanville — PLANT — Goodyear Tire & Rubber Co. of Canada, Ltd., Queen St., 1 story, 60x100 ft., brick, steel exten. to Bldg. 23, to Pigott Constr. Co., Ltd., Pigott Bldg., Hamilton, about **$45,000.**

Ont., Guelph—FACTORY—Rennie Industries, Ltd., 321 Weston Rd. S., Toronto, 1 story, 96x215 ft., steel, brick factory, Woolwich St., to Wm. Parker, 62 Preston St., about **$50,000.**

Ont., Hamilton—SOCKING PITS—Dominion Foundries & Steel, Ltd., Depew St., installing 2 socking pits, to Robb Contg. Co., 2005 Main St., Niagara Falls, about **$30,000.** Prack & Prack, 36 James St. S., archts.

Ont., Iroquois—PLANT—Caldwell Linen Mills, Ltd., Iroquois, H. Caldwell, mgr., 1 story, 95x240x16 ft., ren.-con. bldg., to M. Sullivan & Son, Ltd., Arnprior, about **$168,000.** CD 3/30—ENR 4/5.

Ont., Kapuskasing—GENERATOR, etc.—Spruce Falls Power & Paper Co., Ltd., 330 University Ave., Toronto, 1 story, bsmnt., concrete generator and transformer bldg., to Smith Brothers Constr. Co., Ltd., 1740 Ellen St., Niagara Falls. **$100,000.**

Ont., Leamington—PLANT—H. J. Heinz Co. of Canada, Ltd., Leamington, 1 story, 140x140 ft., concrete, steel frame plant addn., to Anglin-Norcross, Ontario, Ltd., 57 Bloor St. W., Toronto, about **$150,000.** Marani & Morris, 46 Bloor St. W., Toronto, archts.

Ont., London—FACTORY—London Concrete Mchy. Co., 36 Kitchener Ave., 1 story, 55 x 125 ft., brick, steel, concrete factory addn., 15 x 45 ft., rein.-con. central heating plant, automatic stoker, to John Hayman & Sons, 432 Wellington St. Est. **$45,000.** Awarded 4/21.

Ont., Preston — FACTORY — Kralinator Products, Ltd., Hamilton St., factory bldg. addn., to Thomas Constr. Co., Ltd., 45 Dickson St., Galt, **$40,000.** CD 1/24—ENR 2/8.

Ont., Toronto—PLANT—Soren Mfg. Co., Ltd., 11 Brant St., 3 story, bsmnt., 50x158 ft., steel, brick plant, day labor. **$75,000.** I. M. Saunders, 26 E. Queen St., archt. CD 12/11—ENR 12/14.

P. E. I, Red Head—PLANT—H H Cox, Morell, packing plant, to E Byrne, Morell, about **$45,000**

Que., Montreal—FOUNDRY—Crane, Ltd., 1170 Beaver Hall Square, brass foundry, to F. Ross, 736 Cote St. Catherine Rd., **$75,000.**

Que., Montreal—FACTORY—Nuway Food Products, Inc., 6555 Papineau Ave., factory addn., to Gilletz Constr. Ltd., 3952 Clark St., Montreal, **$40,000.** CD 3/14.

Que., Quebec City—ABATTOIR—Maison Sylvain, Quebc City, abattoir, to Paul E. Methieu, 39 Moncton Ave., **$60,000.**

Que., Shawinigan Falls—Shawinigan Water Power Co., Ltd., 107 Craig St. W., Montreal, repairing concrete structures and power house structures at plant, day labor. **$62,800.** J. A. McCrary, c/o owner, engr. CD 3/21—ENR 3/29.

UNCLASSIFIED

PROPOSED WORK

Conn., Bridgeport—DRILL TOWER—Bd. Fire Comrs., 274 Middle St., bids soon aerial drill tower.

†**Conn., Groton**—LIGHTING SYSTEM—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., permanent lighting sys., **NOY 12199.**

Conn., Hartford—HANGAR—Connecticut Aviation Corp., Brainerd Field, 100x100 ft., steel, cinder blocks, face brick and glass block hangar and 2 story, 25x75 ft. wing, Brainerd Field. J. Berenson, 48 Forest St., archt.

Conn., Middletown—STADIUM—Bd. Educ., 251 Court St., plans by G. F. Lamb, Clover St., stadium at Woodrow Wilson High School. $22,000.

Conn., New Britain—BROADCASTING STATION—Central Conn. Broadcasting Co., L. Edwardson, High Rd., Kensington, broadcasting station, towers and bldg.

★**Florida**—RAILWAY—Florida East Coast Ry. Co., L. C. Frohman, ch. engr., St. Augustine, constructing 19 mi. branch line from Okeechobee City to Fort Pierce, main line junction, $1,150,000.

†**Fla., Banana River**—AIR STATION—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., architectural and engineering services by 20th Century Designers, P. O. Box 5477, Jacksonville, addnl. facilities, Naval Air Station. CD 4/4—ENR 4/12.

†**Ga., Gainesville** — RADIO FACILITY — Civil Aeronautics Auth., Airport, Atlanta, YA-2 radio facility.

Louisiana—DOCK—S. W. Richardson, Fort Worth Natl. Bank Bldg., Fort Worth, Tex., installing and maintenance timber loading dock and walkway on timber pile fdn., and 2 clusters of 19 piles each in Mississippi River, right descending bank central to approx. station 1885/25 of the west bank levee survey., about 1 mi. southeasterly from Magnolia, Plaquemine Parish.

†**La., Lake Charles**—BOMBING CORING TARGET RANGE—U. S. Eng., Santa Fe Bldg., Galveston, Tex., bombing coring target range, $16,000.

Mass., West Springfield — ATHLETIC FIELD—Town, H. D. Johnston, chn. Selectmen, 107 Colton Pl., Longmeadow, plans by Howes & Howes, 37 Harvard St., Holyoke, baseball, football, etc., Athletic field, Eastern State Exposition grounds sect. $25,000.

★**Missouri and Illinois**—PIPELINE—Texas Empire Pipe Line Co., Philtower Bldg., Tulsa, Okla., 164 mi. 12 in. crude-oil pipeline in 9 loops between Sheldon, Mo. and Heyworth, Ill., incl. moving several pump units along whole line. $3,434,271.

O., Akron—HANGARS—City, plans 7 "T" type hangars, each housing 6 planes, at municipal airport. $45,000.

O., Akron—HANGAR—B. F. Goodrich Co., 500 S. Main St., hangar at Municipal Airport. $30,000.

O., Akron—HANGAR—Goodyear Tire & Rubber Co., 1144 E. Market St., hangar at Municipal Airport . $75,000.

†**O., Cambridge**—SWIMMING POOLS, etc. —Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., swimming pool, bathhouse at Fletcher General Hospital.

Oregon — TRANSMISSION LINE — Bonneville Power Admin., P.O. Box 3537, Portland, Zone 8, 48 mi. transmission line batween Albany and Toledo with addns. to terminal facilities at Albany sub-station.

†**Pa., Phila.**—ELECTRICAL DISTRIBUTION, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., electrical distribution and lighting imprvs., at Naval Aircraft Factory.

†**Pa., West Point**—AIRPORT—U. S. Eng., Standard Oil Bldg., Baltimore, Md., airport, $180,000.

†**Tex., Fort Sam Houston**—SWIMMING POOL—U. S. Eng., Fort Sam Houston, outdoor swimming pool, 2 athletic fields, etc., $80,000.

Tex., Fort Worth—BOAT WORKS PLANT—Marion Herring Boat Works, Eagle Mountain Lake, Fort Worth, reconstructing boat works plant. $40,000.

†**Tex., Kelly Field** — SPRINKLER SYSTEMS—U. S. Eng., Fort Sam Houston, constructing sprinkler sys., in six 200x800 ft. warehouses, Ser. No. W-41-154-45-114. Over $100,000.

Tex., Kilgore—GAS LINES—Gulf Oil Corp., Kilgore, laying addnl. gas lines in vicinity of gas plant. Over $50,000.

†**Tex., McGregor**—SPUR TRACK—U. S. Eng., 25 St. and Avenue F, Galveston, constructing railway spur track at Bluebonnet Ordnance Plant. Over $25,000.

Tex., Tyler — PIPELINE — Humble Pipe Line Co., Humble Bldg., Houston, 9 mi. 8 in. steel pipeline carrier, crude oil. **$72,000.**

Virginia and West Virginia—POWER LINE—Northern Virginia Power Co., Winchester, Va., high-voltage power line between hydroelectric station at Millville, W. Va., to Double Fallgate, Va. $200,000.

Wash., Hoquiam—FISHING BASE—City, City Hall, expan. fishing fleet base, incl. bulkheads, catwalks, piers, pile driving, sheathing of pile driving and 35,000 cu. ft. dredging. $70,000. W. L. Lovejoy, City Hall, city engr.

Wash., Marshall — RAILWAY SIDING — Northern Pacific Railway Co., B. Blum, ch. engr., 176 E. 5 St., St. Paul 1, Minn., 4,944 ft. siding exten., $30,780.

Wash., Seattle—SUBSTATIONS, etc.—City Light Dpt., City Light Bldg., 3 Ave. and Madison St., Zone 1, substations, $253,000; overhead line construction, $175,000. E. R. Hoffman, City Light Bldg., city light supt.

Wash., Tacoma—TRANSMISSION LINE—City, City Hall, 110 kv-transmission line from Cushman substation to S. 65 St. switching station. $105,000. C. A. Erdahl, utilities comr.

Wisconsin — DISTRIBUTION SYSTEM — Richland Elec. Co-op., C. F. Baldwin, mgr., Richland Center, completing plans 50 mi. electric distr. sys. exten. Wisconsin Elec.-Coop., 302 E. Wilson St., Madison, engr.

Wisconsin—TRANSMISSION LINE—Wis. Pub. Serv. Corp., Bellin Bldg., Green Bay 50 mi. 110 volt transmission line from Wausau to Stevens Point.

Alta, Edson—POWER DEVELOPMENT—Alberta Power Comn., Edmonton, power development on Athabasca River north east of Edson.

Man., Brandon—CAMP—Dominion Govt., Ottawa, Ont., summer camp for army cadets on North Shore of Clear Lake, $50,000. Dpt. National Defence, Ottawa, Ont., engr.

Ont., Elfrida—RADIO TRANSMITTER—Hamilton Wentworth Broadcasting Co., Ltd., Wentworth Bldg., Hamilton, radio transmitter. About $55,000.

Ont., Tillsonburg—ARENA—Lion's Club, Tillsonburg, arena. $80,000.

Ont., Windsor—FLOOD LIGHTING SYSTEM—Canadian Pacific Ry. Co., J. E. Armstrong, ch. engr., Windsor Station, Montreal 3, Que., flood lighting sys. of railway yards. $25,000.

P. E. I., Charlottetown — EXHIBITION GROUNDS — Provincial Govt., Charlottetown, provincial exhibition grounds addns., imprvs. $75,000.

P.E.I., Charlottetown—MARINE RAILWAY SLIP—Bruce Stewart Co., Ltd., 6 Great George St., marine railway slip. $30,000.

Que., Granby—RADIO STATION—Municipality, c/o H. Boivin, mayor, City Hall, radio station, $50,000.

Que., Levis—MONUMENT—Canadian Legion, Levis, war monument, $50,000.

Que., Magog—ELECTRICAL SYSTEM and TRANSMISSION LINES — Municipality, imprv. electrical sys. and transmission lines. About $60,000.

Que., Quebec City—OBSERVATORY—La Societe D'Astronomie, Quebec City, observatory on Abraham Hill. $40,000.

UNCLASSIFIED (Proposed Work, Cont'd.)

Que., Rimouski—BOWLING ALLEYS—Knights of Columbus, c/o M. Bellerance, secy., Rimouski, 2 story, 36x110 ft. bowling alleys, Belzile St. $50,000. Site purchased.

Sask., Nutana (Saskatoon postal district) —RINK, etc.—Saskatoon Playgrounds Assoc., c/o D. L. Hazelton, Saskatoon, rink, swimming pool, paddling pools, etc., $30,000.

Sask., Scott—POWER LINE—Municipality, 3½ mi. power line. M. Miller, Box 86, engr.

BIDS ASKED

Bids Asked May 3

†**Mass., Boston**—WHARF—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C. Constitution Wharf, sheet steel piling, bulkhead, concrete deck, pile wharf, paving works, dredging, etc., for Coast Guard.

†**Tex., Kelly Field**—AUTOMATIC SPRINKLER SYSTEM—U. S. Eng., Fort Sam Houston, install. automatic sprinkler sys. in 12 warehouses and miscellaneous bldgs., Group C, Ser. W-154-45-117.

Bids Asked

Colorado—OIL PIPELINE SYSTEM—Utah Oil & Refining Co., Utah Oil Bldg., Salt Lake City, Utah, crude-oil gathering pipeline sys. Over $100,000. CD 10/23—ENR 10/26.

N. M., Eunice—GENERATING UNITS—El Paso Natural Gas Co., El Paso, two 175 kw. gas-engine-driven generating units, $40,000.

N. Y., Bethpage—RUNWAYS—Gruman Aircraft Engrg. Corp., Bethpage, runways at plant.

Texas and **Louisiana**—GAS LINE—Southern Natural Gas Co., Logansport, La., and City Natl. Bank Bldg., Shreveport, La., 30 mi. 14 in. gas line between Carthage, Tex. and Logansport, La. $100,000. CD 3/21—ENR 3/29.

Texas—ELECTRIC DISTRIBUTION LINES—Taylor Electric Cooperative, Merkel, 105 mi. rural electric power distr. lines, Taylor, Nolan, Callahan, Jones, Shackelford, and Fisher Counties, Freese & Nichols, 407 Capps Bldg., Fort Worth, engrs. CD 4/10—ENR 4/12.

†**Tex., Mineral Wells**—AIRPORT RETURFING, etc.—U. S. Eng., 25 St. and Avenue F, Galveston, returfing and erosion work at Municipal Airport, C-2-1, $15,000.

Wyoming—PIPELINE—Sinclair Refining Co., Riverton, 23 mi. 8 in. steel crude-oil pipeline between Lost Soldier to Crooks Gap, Fremont and Sweetwater Counties. $45,000.

LOW BIDDERS

†**California**—AIR STATION BLDGS.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N. W., Wash., 25, D. C., addns., alterations to Welfare Bldgs., at Auxiliary Air Stations at Arcata, Humboldt Co.; Santa Rosa, Sonoma Co.; Vernalis, San Joaquin Co.; Crows Landing, Stanislaus Co.; Hollister, San Benito Co., and Watsonville, Santa Cruz Co., Spec. 16081, NOY 11800 from G. W. Williams Co., 10 California Dr., Burlingame, $156,785.

†**Calif., Hamilton Field** — PARKING AREA, etc.—U. S. Eng., 74 New Montgomery St., San Francisco, Zone 19, parking area, roads and fencing at Hamilton Field, Spec. 1775-12, from Fredrickson & Watson Constr. Co., 873 81 Ave., Oakland, $44,974.

Calif., Inglewood—AIRPORT GRADING, etc.—City of Los Angeles, City Hall, Apr. 4, grading and portland cement and asphaltic concrete paving portion of Municipal Airport at Century and Redondo Blvd., from H. A. Moore, 2951 W. Valley Blvd., Alhambra, $488,564. CD 3/23, 4/16.

†**Calif., San Francisco** — AUTOMATIC SPRINKLER SYS.—U. S. Eng., 74 New Montgomery St., San Francisco, Zone 19, automatic sprinkler sys. at government bldg., 6 and Channel Sts., from MacDonald & Kahn, Inc., 200 Financial Center Bldg., $89,432.

†**Colo., Denver**—PARKING APRON, etc.—U. S. Eng., 909 17 St., Denver, Apr. 18, parking apron, taxiways from Peter Kiewit Sons Co., 1950 S. Colorado Blvd., $63,758. CD 4/13.

†**Wash., Spokane**—SPRINKLER SYSTEMS—U. S. Eng., Textile Tower, 7 and Olive Sts., Seattle, Zone 1, Apr. 20, addnl. automatic sprinkler sys. in 5 bldgs., at Army Air Depot, Neg. 1122, from W. E. Beggs Co., 234 9 Ave. N., Seattle, Zone 9, $63,716.

CONTRACTS AWARDED

†**Calif., Alameda**—AIR STATION BLDG.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., welfare bldg. addns., Auxiliary Air Station, N.A.B., NOY 11800, to G. W. Williams Co., 10 California Dr., Burlingame, $156,785.

†**Calif., Mare Island**—CRANE TRUSSES—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D.C., replacement crane trusses Bldg. 75, Navy Yard, NOY 11736, to J. E. Branagh, Piedmont, $26,102.

†**Calif., San Francisco**—HOSPITAL TRAIN FACILITIES—U. S. Eng., 74 New Montgomery St., Zone 19, hospital train facilities, Crissy Field, Presidio of San Francisco, Contr. No. W-04-203-eng-1906, to Chas. L. Harney, 625 Market St., San Francisco, $153,598.

†**Calif., Yerba Buena**—DOLPHINS AND CATWALK—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., addnl. dolphins and catwalk for berthing, N.S.P., NOY 11611, to Clinton Constr. Co., 923 Folsom St., San Francisco, $40,456.

†**Colo., Pueblo**—GRAVEL STORAGE PADS—U. S. Eng., 909 17 St., Denver, gravel storage pads for ammunition storage at Pueblo Ordnance Depot to Brown Constr. Co., 1530 E. Abriendo St., $136,000.

†**D. C., Wash.**—SWIMMING POOL—U. S. Eng., 1 and Douglas Sts. N. W., Zone 25, therapeutic swimming pool, Walter Reed General Hospital, Army Medical Center, Contr. No. 49-080-eng-256, to F. H. Martell Co., 920 17 St., $120,100. CD 3/6—ENR 3/8.

★†**Fla., Jacksonville** — AIR STATION HOUSING—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., 835 housing units for families of Navy personnel, at Jacksonville, Cecil Field, Green Cove Springs, Banana River, Sanford, Deland, Lake City and Pensacola, NOY 12168, to Ivy H. Smith Co., 1525 San Marco Blvd., $3,000,000. Awarded 4/14. CD 3/28.

Fla., Jacksonville—RAILROAD—Atlantic Coast Line R.R., W. R. Marye, ch. engr., Atlantic Coast Line Bldg., Wilmington, N. C., reconstructing railroad, incl. rebuilding road bed and relay track, to C. G. Kershaw Contg. Co., 2212 20 Ave. S., Birmingham, Ala., $400,000.

†**Ind., Camp Atterbury**—SWIMMING POOL—U. S. Eng., Federal Bldg., Louisville, Ky., enclosed swimming pool, Contr. No. W-15-029-eng-808, Wakeman General Hospital, to Blauner Constr. Co., 189 W. Madison St., Chicago, Ill., $164,561. CD 11/30—ENR 12/7.

Kan., Wichita—HANGAR BLDGS., etc.—Boeing Airplane Co., Wichita, hangar bldgs., to Clarence Vollmer Constr. Co., 840 N. Main St., $86,400; paving, to Harrison Eng. & Constr. Co., 4638 Mill Creek, Kansas City, Mo., $186,500. CD 4/4—ENR 4/12.

★**Louisiana** and **Mississippi**—OIL PIPELINE—Interstate Oil Pipeline Co., N.B. Bldg., Baton Rouge, 120 mi. 8, 10 and 12 in. steel crude oil pipeline between Baton Rouge, La., and Liberty, Natchez, Miss., etc., to Sharman & Allen, Oil & Gas Bldg., Houston, Tex., approx. $760,000.

†**La., New Orleans**—EARTH BARRICADES—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave., N. W., Wash. 25, D. C., earth barricades at Transfer Depots, Naval Ammunition Depot, NOY 12057, to Perrilliat-Rickey Constr. Co., Inc., 1530 Rendon St., $72,157.

†**Mich., Detroit**—ELECTRICAL WORK—U. S. Eng., 500 Griswold St., electrical work—addn. to test cells, Ford Motor Co., Lincoln Plant, Contr. No. W-20-064-eng-1314, to Triangle Electric Co., 80 Brady St., Zone 1, $25,635.

★†**Mich., Saulte Ste. Marie**—PIER—U. S. Eng., 700 Union Guardian Bldg., Detroit, reconstruction Brady Pier Mooring Basin, at South Canal, St. Marys Falls, to Merritt-Chapman & Scott Corp., 17 Battery Pl., New York, N. Y., $674,285. Bids 3/21, awarded 3/22. CD 3/26—ENR 3/29, under LB.

†**Neb., Sidney**—GRAVEL STORAGE PADS—U. S. Eng., 909 17 St., Denver, Colo., gravel storage pads for ammunition storage at Sioux Ordnance Depot, to Northwestern Engrg. Co., Box 567, Denver, Colo., $268,000.

†**Nev., Fallon**—AIR STATION BLDG.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., physical training bldg. and welfare bldg. addn., Naval Auxiliary Air Station, NOY 11589, to Dinwiddie Constr. Co., Crocker Bldg., San Francisco, Calif., $249,771.

†**N. J., Earle**—GUARD RAILS—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., placing guard rails along fill section of motor highway between East Avenue and Leonardo, Naval Ammunition Depot, NOY 11532, to R. W. Cleveland & Co., 73 N. Park St., E. Orange, $39,490.

†**N. J., Lakehurst**—AIR STATION WATER STORAGE TANK, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., water storage tank and pumps, Naval Air Station, NOY 10391, to L. F. Driscoll, 18 W. Chelten Ave., Phila. 44, Pa., $60,948. CD 4/4.

†**Ore., Clatskanie**—INSPECTION PIT, etc.—U. S. Eng., Pittock Bldg., Portland, inspection pit, road, earth barricade and set-out railway tracks, at Beaver Ammunition Terminal, to C. T. Malcom, 3523 N.E. Dawn, Portland, $24,743. Bids 3/21.

★**Pa., East Pittsburgh** — RAILROAD FACILITIES—Union R. R. Co., H. A. Sayer, ch. engr., East Pittsburgh, imprv. railroad facilities incl. removal of 2 viaducts carrying railroad tracks in East Pittsburgh and North Versailles Twp., and constructing 2 new viaducts replacing them, double track main line, exten., low grade track and realignment of low grade track, to McCrady-Rodgers Constr. Co., 239 4 Ave., Pittsburgh and American Bridge Co., Am. bridge. Total est. $2,450,000. Work under way. (Correction—name of owner). CD 4/3—ENR 4/12.

Pa., Phila.—GRADING, etc.—City, Dpt. P. Wks., City Hall Annex, grading, draining, paving at Northeast Airport, to J. D. Morissey & Co., 9119 Frankford Ave., $56,865. Bids 4/19. CD 2/14—ENR 2/22.

S. C., Charleston—DOCK—Southern Ry. Sys., B. Herman, ch. engr., McPherson Sq., Wash. 13, D. C., rebuilding banana dock, to J. A. Jones Const. Co., 209 W. 4 St., Charlotte, N. C., $200,000. CD 4/9—ENR 4/12.

Tex., Houston—GAS LINES, etc.—Jno. F. Scott, Commerce Bldg., Houston, natural gas lines, sub-division development, own forces, $25,000. CD 11/24—ENR 11/30.

Tex., Jefferson—PIPELINE—Atlantic Pipe Line Co., City Bank Bldg., Shreveport, La., addnl. pipeline, own forces, $60,000. CD 1/23—ENR 1/25.

†**Utah, Ogden**—HEATING FACILITIES—U. S. Eng., 580 S. State St., Salt Lake City, installing addnl. heating facilities in Bldg. 308, Utah A. S. F. Depot, to P. L. Larsen, Provo, $26,605. Bids 4/11. J. E. Kitchen, 580 S. State St., Salt Lake City, engr.

†**Utah, Ogden**—SPRINKLER SYSTEM—U. S. Eng., 1209 8 St., Sacramento, Calif., sprinkler sys. in 19 bldgs., at Ogden Air Depot, Spec. 1078, to Viking Automatic Sprinklers, 149 W. 2 St. S., Salt Lake City, $488,797.

†**Va., Camp Pickett (br. Blackstone)**—AUTOMATIC FIRE ALARM SYSTEMS—U. S. Eng., Fort Norfolk, automatic fire alarm sys., Contr. No. W-44-110-eng-430, to A.D.T. Corp., 700 E. Grace St., Richmond, $28,984.

†**Wash., Seattle**—SPRINKLER & FIRE ALARM SYSTEM—U. S. Eng., Textile Tower, Zone 1, sprinkler and fire alarm sys., Port of Embarkation, Contr. No. W-45-106-eng-1412, to American District Telegraph Co., Douglas Bldg., Seattle, $34,398.

Wyoming—CRUDE OIL PIPELINE—Sinclair Refining Co., Riverton, 36½ mi. 8 in. crude oil pipeline from Crooks Gap to Sand Draw, Fremont Co., to O. C. Whitaker Co., D. Waggoner Bldg., Fort Worth, Tex. $120,000. CD 1/29—ENR 2/1.

B. C., Grand Forks—RAILWAY REALIGNMENT—Canadian Pacific Ry. Co., J. E. Armstrong, ch. engr., Windsor Station, Montreal 3, Que., railway realignment, involving 15,000 cu. yd. rock excav. and laying 1,500 cu. yd. concrete, to Highway Constr. Co., Ltd., 789 West Pender St., Vancouver, $50,000.

B. C., Vancouver — TOWERS — National Harbours Bd., Ottawa, Ont., supporting towers for No. 3 Grain Jetty, to C. H. E. Williams Co., Ltd., 509 Richards St., $15,000.

Ont., Fort William——DOCKS—N. M. Paterson & Co., Ltd., Fort William, repairing docks, to Thunder Bay Harbour Imprvts. Co., Rutton Block, $37,000.

Ont., Niagara Falls—GREENHOUSE—Niagara Falls Park Comn., C. Daley, chn., greenhouse in Queen Victoria Park, to Lord and Burnham Co., Ltd., 325 Welland St., $100,000.

Que., Outardes Falls—POWER DEVELOPMENT—Quebec North Shore Paper Co., Ltd., Baie Comeau, imprv. power development at Outardes Falls, new flume, etc., day labor, $62,000. W. Beekie, Baie Comeau, engr.

Sask., Unity—GAS DRILLING—Bata Petroleum, Ltd., 316 Broder Bldg., Regina, natural gas drilling, to General Petroleums Ltd., Calgary, Alta. Est. $100,000. Denton & Spencer, Calgary, Alta., engrs.

Proposed Advertisements see p. 23